

# ALL THE YEAR ROUND.

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## NO NAME.

BY THE AUTHOR OF "THE WOMAN IN WHITE," &c.

### CHAPTER X.

ON returning to the house, Magdalen felt her shoulder suddenly touched from behind, as she crossed the hall. She turned, and confronted her sister. Before she could ask any questions, Norah confusedly addressed her, in these words: "I beg your pardon; I beg you to forgive me."

Magdalen looked at her sister in astonishment. All memory, on her side, of the sharp words which had passed between them in the shrubbery, was lost in the new interests that now absorbed her; lost as completely as if the angry interview had never taken place. "Forgive you!" she repeated, amazedly, "what for?"

"I have heard of your new prospects," pursued Norah, speaking with a mechanical submissiveness of manner which seemed almost ungracious; "I wished to set things right between us; I wished to say I was sorry for what happened. Will you forget it? Will you forget and forgive what happened in the shrubbery?" She tried to proceed; but her inveterate reserve—or, perhaps, her obstinate reliance on her own opinions—silenced her at those last words. Her face clouded over on a sudden. Before her sister could answer her, she turned away abruptly and ran up stairs.

The door of the library opened, before Magdalen could follow her; and Miss Garth advanced to express the sentiments proper to the occasion.

They were not the mechanically-submissive sentiments which Magdalen had just heard. Norah had struggled against her rooted distrust of Frank, in deference to the unanswerable decision of both her parents in his favour; and had suppressed the open expression of her antipathy, though the feeling itself remained unconquered. Miss Garth had made no such concession to the master and mistress of the house. She had hitherto held the position of a high authority on all domestic questions; and she flatly declined to get off her pedestal in deference to any change in the family circumstances, no matter how amazing or how unexpected that change might be.

"Pray accept my congratulations," said Miss Garth, bristling all over with implied objections

to Frank—"my congratulations, and my apologies. When I caught you kissing Mr. Francis Clare in the summer-house, I had no idea you were engaged in carrying out the intentions of your parents. I offer no opinion on the subject. I merely regret my own accidental appearance in the character of an Obstacle to the course of true love—which appears to run smooth in summer-houses, whatever Shakespeare may say to the contrary. Consider me for the future, if you please, as an Obstacle removed. May you be happy!" Miss Garth's lips closed on that last sentence like a trap; and Miss Garth's eyes looked ominously prophetic into the matrimonial future.

If Magdalen's anxieties had not been far too serious to allow her the customary free use of her tongue, she would have been ready, on the instant, with an appropriately satirical answer. As it was, Miss Garth simply irritated her. "Pooh!" she said—and ran up-stairs to her sister's room. She knocked at the door, and there was no answer. She tried the door, and it resisted her from the inside. The sullen, unmanageable Norah was locked in.

Under other circumstances, Magdalen would not have been satisfied with knocking—she would have called through the door loudly and more loudly, till the house was disturbed, and she had carried her point. But the doubts and fears of the morning had unnerved her already. She went down stairs again softly, and took her hat from the stand in the hall. "He told me to put my hat on," she said to herself, with a meek filial docility which was totally out of her character.

She went into the garden, on the shrubbery side; and waited there to catch the first sight of her father on his return. Half an hour passed; forty minutes passed—and then his voice reached her from among the distant trees. "Come in to heel!" she heard him call out loudly to the dog. Her face turned pale. "He's angry with Snap!" she exclaimed to herself, in a whisper. The next minute he appeared in view; walking rapidly, with his head down, and Snap at his heels in disgrace. The sudden excess of her alarm as she observed those ominous signs of something wrong, rallied her natural energy, and determined her desperately on knowing the worst.

She walked straight forward to meet her father.

"Your face tells your news," she said, faintly. "Mr. Clare has been as heartless as usual—Mr. Clare has said, No?"

Her father turned on her with a sudden severity, so entirely unparalleled in her experience of him, that she started back in downright terror.

"Magdalen!" he said, "whenever you speak of my old friend and neighbour again, bear this in mind. Mr. Clare has just laid me under an obligation which I shall remember gratefully to the end of my life."

He stopped suddenly, after saying those remarkable words. Seeing that he had startled her, his natural kindness prompted him instantly to soften the reproof, and to end the suspense from which she was plainly suffering. "Give me a kiss, my love," he resumed; "and I'll tell you in return that Mr. Clare has said—Yes."

She attempted to thank him; but the sudden luxury of relief was too much for her. She could only cling round his neck in silence. He felt her trembling from head to foot, and said a few words to calm her. At the altered tones of his master's voice, Snap's meek tail reappeared fiercely from between his legs; and Snap's lungs modestly tested his position with a brief experimental bark. The dog's quaintly appropriate assertion of himself on his old footing, was the interruption of all others which was best fitted to restore Magdalen to herself. She caught the shaggy little terrier up in her arms, and kissed him next. "You darling," she exclaimed, "you're almost as glad as I am!" She turned again to her father, with a look of tender reproach. "You frightened me, papa," she said. "You were so unlike yourself."

"I shall be right again, to-morrow, my dear. I am a little upset to-day."

"Not by me?"

"No, no."

"By something you have heard at Mr. Clare's?"

"Yes—nothing you need alarm yourself about; nothing that won't wear off by to-morrow. Let me go now, my dear, I have a letter to write; and I want to speak to your mother."

He left her, and went on to the house. Magdalen lingered a little on the lawn, to feel all the happiness of her new sensations—then turned away towards the shrubbery, to enjoy the higher luxury of communicating them. The dog followed her. She whistled, and clapped her hands. "Find him!" she said, with beaming eyes. "Find Frank!" Snap scampered into the shrubbery, with a bloodthirsty snarl at starting. Perhaps he had mistaken his young mistress, and considered himself her emissary in search of a rat?

Meanwhile, Mr. Vanstone entered the house. He met his wife, slowly descending the stairs, and advanced to give her his arm. "How has it ended?" she asked anxiously, as he led her to the sofa.

"Happily—as we hoped it would," answered

her husband. "My old friend has justified my opinion of him."

"Thank God!" said Mrs. Vanstone, fervently. "Did you feel it, love?" she asked, as her husband arranged the sofa pillows—"did you feel it as painfully as I feared you would?"

"I had a duty to do, my dear—and I did it."

After replying in those terms, he hesitated. Apparently, he had something more to say—something, perhaps, on the subject of that passing uneasiness of mind, which had been produced by his interview with Mr. Clare, and which Magdalen's questions had obliged him to acknowledge. A look at his wife decided his doubts in the negative. He only asked if she felt comfortable; and then turned away to leave the room.

"Must you go?" she asked.

"I have a letter to write, my dear."

"Anything about Frank?"

"No: to-morrow will do for that. A letter to Mr. Pendril; I want him here immediately."

"Business, I suppose?"

"Yes, my dear—business."

He went out, and shut himself into the little front room, close to the hall-door, which was called his study. By nature and habit the most procrastinating of letter-writers, he now inconsistently opened his desk and took up the pen without a moment's delay. His letter was long enough to occupy three pages of note-paper; it was written with a readiness of expression and a rapidity of hand which seldom characterised his proceedings when engaged over his ordinary correspondence. He wrote the address as follows, "Immediate:—William Pendril Esq., Searle-street, Lincoln's Inn, London"—then pushed the letter away from him, and sat at the table, drawing lines on the blotting-paper with his pen, lost in thought. "No," he said to himself; "I can do nothing more till Pendril comes." He rose; his face brightened as he put the stamp on the envelope. The writing of the letter had sensibly relieved him, and his whole bearing showed it as he left the room.

On the door-step, he found Norah and Miss Garth, setting forth together for a walk.

"Which way are you going?" he asked. "Anywhere near the post-office? I wish you would post this letter for me, Norah. It is very important—so important, that I hardly like to trust it to Thomas as usual."

Norah at once took charge of the letter.

"If you look, my dear," continued her father, "you will see that I am writing to Mr. Pendril. I expect him here to-morrow afternoon. Will you give the necessary directions, Miss Garth? Mr. Pendril will sleep here to-morrow night, and stay over Sunday.—Wait a minute! To-day is Friday. Surely I had an engagement for Saturday afternoon?" He consulted his pocket-book, and read over one of the entries, with a look of annoyance. "Grailsea Mill, three o'clock, Saturday. Just the time when Pendril will be here; and I must be at home to see him."

How can I manage it? Monday will be too late for my business at Grailsea. I'll go to-day, instead; and take my chance of catching the miller at his dinner-time." He looked at his watch. "No time for driving; I must do it by railway. If I go at once, I shall catch the down train at our station, and get on to Grailsea. Take care of the letter, Norah. I won't keep dinner waiting; if the return train doesn't suit, I'll borrow a gig, and get back in that way."

As he took up his hat, Magdalen appeared at the door, returning from her interview with Frank. The hurry of her father's movements attracted her attention; and she asked him where he was going.

"To Grailsea," replied Mr. Vanstone. "Your business, Miss Magdalen, has got in the way of mine—and mine must give way to it."

He spoke those parting words in his old hearty manner; and left them, with the old characteristic flourish of his trusty stick.

"My business!" said Magdalen. "I thought my business was done."

Miss Garth pointed significantly to the letter in Norah's hand. "Your business, beyond all doubt," she said. "Mr. Pendril is coming to-morrow; and Mr. Vanstone seems remarkably anxious about it. Law, and its attendant troubles already! Governesses who look in at summer-house doors are not the only obstacles to the course of true love. Parchment is sometimes an obstacle. I hope you may find Parchment as pliable as I am—I wish you well through it. Now, Norah!"

Miss Garth's second shaft struck as harmless as the first. Magdalen had returned to the house, a little vexed; her interview with Frank having been interrupted by a messenger from Mr. Clare, sent to summon the son into the father's presence. Although it had been agreed at the private interview between Mr. Vanstone and Mr. Clare, that the questions discussed that morning should not be communicated to the children, until the year of probation was at an end—and although, under these circumstances, Mr. Clare had nothing to tell Frank which Magdalen could not communicate to him much more agreeably—the philosopher was not the less resolved on personally informing his son of the parental concession which rescued him from Chinese exile. The result was a sudden summons to the cottage, which startled Magdalen, but which did not appear to take Frank by surprise. His filial experience penetrated the mystery of Mr. Clare's motives easily enough. "When my father's in spirits," he said, sulkily, "he likes to bully me about my good luck. This message means that he's going to bully me now."

"Don't go," suggested Magdalen.

"I must," rejoined Frank. "I shall never hear the last of it, if I don't. He's primed and loaded, and he means to go off. He went off, once, when the engineer took me; he went off, twice, when the office in the City took me; and

he's going off, thrice, now you've taken me. If it wasn't for you, I should wish I had never been born. Yes; your father's been kind to me, I know—and I should have gone to China, if it hadn't been for him. I'm sure I'm very much obliged. Of course, we have no right to expect anything else—still, it's discouraging to keep us waiting a year, isn't it?"

Magdalen stopped his mouth by a summary process, to which even Frank submitted gratefully. At the same time, she did not forget to set down his discontent to the right side. "How fond he is of me!" she thought. "A year's waiting is quite a hardship to him." She returned to the house, secretly regretting that she had not heard more of Frank's complimentary complaints. Miss Garth's elaborate satire, addressed to her while she was in this frame of mind, was a purely gratuitous waste of Miss Garth's breath. What did Magdalen care for satire? What do Youth and Love ever care for, except themselves? She never even said as much as "Pooh!" this time. She laid aside her hat in serene silence, and sauntered languidly into the morning-room to keep her mother company. She lunched on dire forebodings of a quarrel between Frank and his father, with accidental interruptions in the shape of cold chicken and cheesecakes. She trifled away half an hour at the piano; and played, in that time, selections from the Songs of Mendelssohn, the Mazurkas of Chopin, the Operas of Verdi, and the Sonatas of Mozart—all of whom had combined together on this occasion, and produced one immortal work, entitled "Frank." She closed the piano and went up to her room, to dream away the hours luxuriously in visions of her married future. The green shutters were closed, the easy chair was pushed in front of the glass, the maid was summoned as usual; and the comb assisted the mistress's reflections, through the medium of the mistress's hair, till heat and idleness asserted their narcotic influences together, and Magdalen fell asleep.

It was past three o'clock when she woke. On going down stairs again she found her mother, Norah, and Miss Garth all sitting together enjoying the shade and the coolness under the open portico in front of the house.

Norah had the railway time-table in her hand. They had been discussing the chances of Mr. Vanstone's catching the return train, and getting back in good time. That topic had led them, next, to his business errand at Grailsea—an errand of kindness, as usual; undertaken for the benefit of the miller, who had been his old farm-servant, and who was now hard pressed by serious pecuniary difficulties. From this they had glided insensibly into a subject often repeated among them, and never exhausted by repetition—the praise of Mr. Vanstone himself. Each one of the three had some experience of her own to relate of his simple, generous nature. The conversation seemed to be almost painfully

interesting to his wife. She was too near the time of her trial now, not to feel nervously sensitive to the one subject which always held the foremost place in her heart. Her eyes overflowed as Magdalen joined the little group under the portico; her frail hand trembled, as it signed to her youngest daughter to take the vacant chair by her side. "We were talking of your father," she said, softly. "Oh, my love, if your married life is only as happy—" Her voice failed her; she put her handkerchief hurriedly over her face, and rested her head on Magdalen's shoulder. Norah looked appealingly to Miss Garth; who at once led the conversation back to the more trivial subject of Mr. Vanstone's return. "We have all been wondering," she said, with a significant look at Magdalen, "whether your father will leave Grailsea in time to catch the train—or whether he will miss it, and be obliged to drive back. What do you say?"

"I say, papa will miss the train," replied Magdalen, taking Miss Garth's hint with her customary quickness. "The last thing he attends to at Grailsea, will be the business that brings him there. Whenever he has business to do, he always puts it off to the last moment—doesn't he, mamma?"

The question roused her mother exactly as Magdalen had intended it should. "Not when his errand is an errand of kindness," said Mrs. Vanstone. "He has gone to help the miller, in a very pressing difficulty."

"And don't you know what he'll do?" persisted Magdalen. "He'll romp with the miller's children, and gossip with the mother, and hob-and-nob with the father. At the last moment, when he has got five minutes left to catch the train, he'll say, 'Let's go into the counting-house, and look at the books.' He'll find the books dreadfully complicated; he'll suggest sending for an accountant; he'll settle the business off-hand, by lending the money in the mean time; he'll jog back comfortably in the miller's gig; and he'll tell us all how pleasant the lanes were in the cool of the evening."

The little character-sketch which these words drew, was too faithful a likeness not to be recognised. Mrs. Vanstone showed her appreciation of it by a smile. "When your father returns," she said, "we will put your account of his proceedings to the test. I think," she continued, rising languidly from her chair, "I had better go in-doors again now, and rest on the sofa till he comes back."

The little group under the portico broke up. Magdalen slipped away into the garden to hear Frank's account of the interview with his father. The other three ladies entered the house together. When Mrs. Vanstone was comfortably established on the sofa, Norah and Miss Garth left her to repose, and withdrew to the library to look over the last parcel of books from London.

It was a quiet, cloudless summer's day. The heat was tempered by a light western breeze;

the voices of labourers at work in a field near, reached the house cheerfully; the clock-bell of the village church as it struck the quarters, floated down the wind with a clearer ring, a louder melody than usual. Sweet odours from field and flower-garden, stealing in at the open windows, filled the house with their fragrance; and the birds in Norah's aviary up-stairs, sang the song of their happiness exultingly in the sun.

As the church clock struck the quarter-past four, the morning-room door opened; and Mrs. Vanstone crossed the hall alone. She had tried vainly to compose herself. She was too restless to lie still, and sleep. For a moment, she directed her steps towards the portico—then turned, and looked about her, doubtful where to go, or what to do next. While she was still hesitating, the half-open door of her husband's study attracted her attention. The room seemed to be in sad confusion. Drawers were left open; coats and hats, account-books and papers, pipes and fishing-rods, were all scattered about together. She went in, and pushed the door to—but so gently that she still left it ajar. "It will amuse me to put his room to rights," she thought to herself. "I should like to do something for him, before I am down on my bed helpless." She began to arrange his drawers; and found his banker's book lying open in one of them. "My poor dear, how careless he is! The servants might have seen all his affairs, if I had not happened to have looked in." She set the drawers right; and then turned to the multifarious litter on a side-table. A little old-fashioned music-book appeared among the scattered papers, with her name written in it, in faded ink. She blushed like a young girl in the first happiness of the discovery. "How good he is to me! He remembers my poor old music-book, and keeps it for my sake." As she sat down by the table and opened the book, the bygone time came back to her in all its tenderness. The clock struck the half-hour, struck the three-quarters—and still she sat there, with the music-book on her lap, dreaming happily over the old songs; thinking gratefully of the golden days when his hand had turned the pages for her, when his voice had whispered the words which no woman's memory ever forgets.

Norah roused herself from the volume she was reading, and glanced at the clock on the library mantelpiece.

"If papa comes back by railway," she said, "he will be here in ten minutes."

Miss Garth started, and looked up drowsily from the book which was just dropping out of her hand.

"I don't think he will come by train," she replied. "He will jog back—as Magdalen flipantly expressed it—in the miller's gig."

As she said the words, there was a knock at the library-door. The footman appeared, and addressed himself to Miss Garth.

"A person wishes to see you, ma'am."



"Who is it?"

"I don't know, ma'am. A stranger to me—a respectable-looking man—and he said he particularly wished to see you."

Miss Garth went out into the hall. The footman closed the library door after her; and withdrew down the kitchen stairs.

The man stood just inside the door, on the mat. His eyes wandered, his face was pale—he looked ill; he looked frightened. He trifled nervously with his cap, and shifted it backwards and forwards, from one hand to the other.

"You wanted to see me?" said Miss Garth.

"I beg your pardon, ma'am.—You are not Mrs. Vanstone, are you?"

"Certainly not. I am Miss Garth. Why do you ask the question?"

"I am employed in the clerk's office at Grailsea station——"

"Yes?"

"I am sent here——"

He stopped again. His wandering eyes looked down at the mat, and his restless hands wrung his cap harder and harder. He moistened his dry lips, and tried once more.

"I am sent here on a very serious errand."

"Serious to me?"

"Serious to all in this house."

Miss Garth took one step nearer to him—took one steady look at his face. She turned cold in the summer heat. "Stop!" she said, with a sudden distrust, and glanced aside anxiously at the door of the morning-room. It was safely closed. "Tell me the worst; and don't speak loud. There has been an accident. Where?"

"On the railway. Close to Grailsea station."

"The up-train, to London?"

"No: the down-train at one-fifty——"

"God Almighty help us! The train Mr. Vanstone travelled by to Grailsea?"

"The same. I was sent here by the up-train: the line was just cleared in time for it. They wouldn't write—they said I must see 'Miss Garth,' and tell her. There are seven passengers badly hurt; and two——"

The next word failed on his lips: he raised his hand in the dead silence. With eyes that opened wide in horror, he raised his hand and pointed over Miss Garth's shoulder.

She turned a little, and looked back.

Face to face with her, on the threshold of the study-door, stood the mistress of the house. She held her old music-book clutched fast mechanically in both hands. She stood, the spectre of herself. With a dreadful vacancy in her eyes, with a dreadful stillness in her voice, she repeated the man's last words:

"Seven passengers badly hurt; and two——"

Her tortured fingers relaxed their hold; the book dropped from them; she sank forward heavily. Miss Garth caught her before she fell—caught her; and turned upon the man, with the wife's swooning body in her arms, to hear the husband's fate.

"The harm is done," she said: "you may speak out. Is he wounded, or dead?"

"Dead!"

### SOLDIERS' LEISURE HOURS.

EVERY private soldier in the English army, when on colonial service, has been calculated by political economists to cost the nation about one hundred pounds sterling per annum. Without reckoning his heart or brain, which are thrown into the bargain, each individual soldier, therefore, whether at home or abroad, must represent, we presume, a cost of nearly one hundred pounds sterling—red coat, cross-belts, bayonet, &c., included.

Now, as we are an over-taxed people and ought not to throw more money away, let us for a moment, as sincere friends of the soldier, consider how we can honestly make the most of him in times of peace, when, as the old proverb goes, a soldier somewhat resembles "a chimney in summer." We do not want to overwork him, or to make a slave of him, but we want to prevent his becoming a worthless vagabond, idle and miserable himself, a cause of misery to others. We want above all, if we can, to prevent his enlisting in that already far too well-manned regiment, the BLACKGUARDS.

We have seen English soldiers in many parts of the world—in Gibraltar and Corfu, at Zante, in Canada, at Malta, in the Channel Islands, in Ireland, in Scotland—and we know their daily life, its pleasures and vexations, its petty annoyances, its monotony, its prison-like severity, its innumerable temptations. We have listened to English officers, hour after hour, as they told of scrub-fighting in Caffreland; of capture of forts in China; of hand-to-hand struggles with the Maories of New Zealand; of stormy charges of the Sikh horsemen; of terrible beleaguements by yelling Sepoys. We respect the courage shown by the English soldier in every country; we admire his noble endurance; we love to hear of his grave unostentatious heroism; but the more we hear of him, the more we wish to render him a useful and prudent citizen.

The civilian, we must premise, must not look on the soldier in peace as by any means an idle man. If he be a foot soldier, he has his belts to pipeclay, his uniform to brush, his boots to clean, his gloves to wash, his rifle to furbish, his bayonet to scour or sharpen; he has also his parades and sentinel duty, his barrack-room work, and all sorts of regimental formulary to carry on. If he be in the cavalry, his horse gives him infinite trouble; not a hair on the animal's hide must be out of place, and then there are the sword, carbine, saddle, stirrups, and bridle chain, and many other trappings, to keep free from the all-penetrating rust, and to clean, scour, scrub, rub, and wash. If he be an artilleryman, there is endless gun drill, and there are many new rules of science hourly, to learn or to practise. If he be a musician, there is his instrument perpetually

to study, alone or in company with other instruments. Indeed, so much have private soldiers to learn, individually and collectively, that it is supposed that a good and complete foot soldier can scarcely be turned out in less than three years. By a complete soldier, we mean one who performs by instinct every individual and collective manœuvre, whether he has to work in battalion or company, in solid square, or in broken and retreating masses.

It is, we think, universally allowed, that intellectually, the English labourer improves by becoming a soldier. The red-faced vacant-eyed lad, who moved his legs only a year ago as if they were solid lead from the knees downward: can he be that smart neat nimble fellow in the Guards standing sentinel at a door in Pall-Mall? A mountain of black bearskin hides the low heavy forehead; the legs, cased in red-corded black trousers, are firm, straight, and alert in movement. They obey the officer's orders as the ivory key of the piano does the finger of the player. The lad's mind has more grasp now, and, like his legs, can move more quickly and spontaneously. He is not a braver man than he was when he only knew how to handle the scythe or the reaping-hook; but he is a more orderly and methodical creature, and knows how to move about to some purpose, and that too in the fire and smoke of battle. His mind, too, is prompter, because it has been taught to reflect on a wider range of topics. He is a better man now, not merely because he has learnt to move his feet and hands in a certain way on certain words being uttered, but because he has been exercising his powers of reflection on a difficult routine, and in a new profession. His every-day life is in fact an education itself, compared to his old dreary existence in Downshire, where sheep-minding, pig-feeding, and driving horses to water, presented few subjects for thought.

Morally, however, we cannot say as much for him, for he has fallen among a set of men who spend all their time in the low public-houses leading from Pimlico to Westminster: who drink, gamble, swear, and cut unoffending people's heads open with their heavy-buckled belts: a vicious, idle set, with many broken constitutions among them that would not sustain the fatigues of a single campaign.

Alas, that we can nowhere see English soldiers but there are such men among them. Go to Gibraltar, and there inside the low rum-shops in "Snake-in-the-Grass-lane," you will find such fellows roaring, cursing, and threatening death. Go to Malta, and there in the back streets of Valetta reel along the same sort of men. Go to Quebec, and there, close to the ramparts, there is no alley in which you will not meet a bruised drunken soldier being bumped along, in the hands of the picket. Go to many an English garrison town, and ask the magistrate of the day if he finds the soldiers troublesome.

Now, cheap or gratuitous Reading Rooms and Free Libraries are excellent things for the more thoughtful and intellectual soldier. The man

who has been a mechanic, the man who has taken at an early age to reading (Scotchmen generally do, to their infinite honour be it said), will naturally solace their leisure moments with books; and in these days of good cheap literature, they can do so easily, but these are not the men whose leisure hours we want to find occupation for. These men probably, in any profession, would be prudent, quiet, and industrious. To some men it is pain and grief to be idle. These readers soon get recognised, become corporals and sergeants, and pass into better places. It is the rough rank and file, the brute ordinary mass, that we want to see more civilised and better employed. It is the thoughtless Irish madeap, the bully of the regiment, the drunkard, the habitual deserter, the refractory, the mutinous, that we want to find healthy recreation for, and to wean from the misuse of the gin-bottle, the dirty cards, the tavern songs, the bagatelle-board, the dice, and the beer-jug.

Now, there are men of certain temperament, of certain ages, and of certain education, who cannot derive pleasure from intellectual pursuits. They have no imagination, no powers of reflection; they bring nothing to the book, so the book brings nothing to them; they prefer to see things rather than to read of them. They could talk for an hour over Sergeant Pontoon's story of the Kaiber Pass, but to read ten lines about it in a book would set them yawning. They like a play, they like a story, but they have not the sort of mind that can appreciate a book, nor has culture of any kind ever enabled them to replace their loss. Their pre-regimental life, spent in a colliery, or in the street, or in a barge, or in a factory, was too hard and busy.

No! Our soldiers want what the mere healthy animal—man—always craves for, and that is, EXERCISE, made pleasurable in the form of athletic games, constant exercise stimulated by gymnastics, exercise that, under a tepid depressing climate, must be rendered competitive and exciting; exercise, above all, that will tend to make him a stronger, a more agile, and a more self-reliant soldier.

Our officers know well enough that it is not mere drill that makes the perfect soldier. It is not learning by mechanical instinct to fire so many times in a minute, or to click on and off the bayonet with astonishing but automaton quickness, that makes the model soldier. No drill can give men stamina or endurance, and no drill will enable them to "pull through" blundering Walcheren expeditions, or to baffle Yellow Jack in fever quarters at Barbadoes. Drill alone does not make the soldier return safe and healthy from Corunna retreats, or restore him and the hundred pounds sterling he represents, to the anxious tax-payer.

Our officers know well that it is their solemn duty to direct their soldiers' amusements; to forget now and then the billiard-room, Rotten-row, and what not, and to lead away their men's minds from the incessant filthy grog-shop and low vice; but yet they too often neglect this duty. They need sacrifice no position; they could still be officers

and gentlemen, though they did lead the men at single-stick, at leaping hurdles, at boxing, at fencing, at back-sword and quarter-staff, at lifting weights, at climbing. At all of these healthy and useful amusements, education, a little science reflection and comparison, would give them an advantage over the mere brute strength and impetuosity of the common men. They might occasionally offer small prizes, while the corporals and sergeants could maintain order and prevent any unfairness, any brutality, or any undue exhibition of temper.

It is not enough that such exercises should be spasmodic and occasional; they should be incessant, in all climates and in all places. Wherever English soldiers are stationed, there athletic games should be established, and incessantly be kept a going. Such sports would soon, by their pure healthy influence, wean the drinker from his drink, and the gambler from his cards. They would do much, to "set up" our soldier: to widen his chest, to harden his limbs, and to make him as he should be—the strongest, hardiest, and most active of Englishmen. He surely needs hardening, for Heaven knows what rough weather and heavy blows he may have one day to endure; or in what bloody ditch or red-hot breach, he may have to fight for his life.

Our army, it must be remembered, is not all made up of strong countrymen; it is at least two-thirds composed of poor thin mechanics, of London prodigals, of decayed spendthrifts, and the wandering scum of our towns. No mere drill can give these men broad chests, strong arms, or quick legs, though regular food and settled hours make them, in time, stout, red, and hearty. It is the army with the best and most enduring stamina that wins—such had Cæsar's legionaries. It is the keenest and alertest intelligence that is victorious—as in the case of Napoleon versus Wurmser, when the latter complained that the young Corsican general did not fight according to "the old-established rules." It is the good cause and the pure heart, like Garibaldi's, that defeats the trained army and the Austrian wooden-heads. It is the fervid faith, as of the Swiss mountaineers, that can break up a great power as if it were an image of ice.

There are wise and far-seeing doctors now living, who think that from some unknown cause our race is physically degenerating, and that our sons are growing up, physically weaker and more nervous than ourselves.\* Some think it is the incessant tea, that has taken the place of hearty breakfasts of meat and weak wine; others attribute it to smoking, late hours, and the increased wear and tear of our brain and nerves. It is found dangerous now, to bleed in cases of fever or of apoplexy. Men, apparently hearty, sink suddenly into old age. Nervous diseases increase daily. Our social hours grow every day less healthy and natural.

\* We do not adopt this opinion, which is, to the best of our knowledge, opposed by all Life Office experience and Annuity Calculations.—En.

We rise long after the sun and the animals, long after they are asleep we are wasting our brains and thinning our blood in heated rooms;

The world is too much with us! Late and soon,  
Getting and spending, we lay waste our powers.  
Little there is in nature that is ours.

Now, as new forms of dress and diet are adopted by us all, hereditarily, irrationally, without reflection, and without any knowledge or thought of their wide-spreading results, it may be long before we learn how to stop this physical degeneracy. It is, therefore, most important, that by all means we contrive to keep our soldiers strong and vigorous, whosoever else may degenerate.

Every barrack should have a zinc-covered shed, open to every soldier when off duty, without fee and at all hours. Gymnastic poles, ropes, foils, and other such appliances, should be furnished by government, aided (perhaps) by regimental subscriptions. The men should or should not contribute, according to future opinion on the subject. The soldiers' library should contain books on all gymnastic subjects; and the sergeants and corporals should be taught by proper professors, at the government expense.

We would go even further than this. If an enormous standing army, occasioning millions of taxation, must be maintained, in spite of a hundred and fifty thousand volunteers, why not make our army as much as possible an army of good and not an army of evil, a force of industry and not of idleness, a power for use and not for show: a great regiment working with smiles from Heaven on it, and not smiled on from below? Why should we pay thousands of men, merely for pipeclaying belts, and standing at doors, guarding what never did, and never will, want guarding? Why should we not get work for our wages? Have we no great national needs to direct drilled labour upon? Are there no bog of Allan, no Curragh of Kildare, no Connemara morasses, to drain, and render fit for the crops to blossom over; no great national hill-roads to make; no refuge harbours to pile up, no Dartmoor to clear, no forest to cultivate? Suppose we did pay the soldier a few pence beyond his pay while engaged on these national works, would one tax-payer grudge it? When did great national works ever return a percentage? The Pyramids never paid; the Coliseum must have been commercially a failure. It is only the old stupid Chinese conservatism which bade Galileo fall on his knees, and, on pain of death, swear before God and the angels that "the world did not and could not move," that would oppose such work.

Were it possible that not merely the idle soldiers, but also the great shivering army of starving Englishmen, could now defile before me, I would then cry in their hearing, in a voice that should shake the Circumlocution Office and the Barnacles, these memorable words of one of our greatest thinkers:

"My misguided friends, I should think some work might be discoverable for you to become from a nomadic banditti of idleness, soldiers of

industry. I will lead you to the Irish bogs, to the vacant desolations of Connaught, to mistilted Connaught, to ditto Munster, Leinster, and Ulster. I will lead you to the English fox covets, furze-grown commons, new forests, Salisbury Plains; likewise to the Scotch hillsides and bare rusty slopes, which as yet feed only sheep, moist uplands, thousands of square miles in extent, which are destined yet to grow green crops, and fresh butter, and milk, and beef without limit (wherein no foreigner can compete with us), were the sewers once opened on them, and you with your colonels carried thither. In the three kingdoms, or in the forty colonies, depend upon it you shall be led to your work. To each of you I will say: Here is work for you; strike into it with manly soldier-like obedience and heartiness."

#### WHAT MIGHT HAVE BEEN.

WHAT significance lies in that little phrase—What might have been! Who does not know the days when his fortune was balanced on the chance of a moment, when the turning into one street instead of another, the paying one visit and leaving another owing, the writing of this letter and letting that remain unanswered, changed the whole current of his life, and gave the world another cycle of generations to what might have been? I can count up on my fingers numerous instances known to me, among my own friends, whose fortunes were this creation of chance moments, and who might as easily have obtained any other combination as that which gave them happiness or ruin. See what chance did for poor Miss Mary, the young governess at Merton Hall. Miss Mary had two offers—I mean for a situation, nothing more—one, was from a vicar's wife somewhere down in Wales; the other, from Miss Merton, of Merton Hall, a county family place in Devonshire. Miss Mary was a goose—as Miss Marys often are—and thought that the grand county family who sealed with a flourishing coat of arms, and who had their names in the county history, must be a better speculation than a little unknown parsonage behind the Welsh mountains; besides, they offered five pounds a year more, which represented a gown, a cloak, and a bonnet to Miss Mary. So, stifling the instinct which inclined her to the gentle motherly vicar's wife, who wrote so kindly and so modestly, she preferred Dives and his flourishing coat of arms, and transported herself to the grand county family. All very well; nothing to find fault with; Mrs. Merton as condescendingly considerate as fine ladies of good hearts generally are to their dependents; and Miss Mary was thankful, and remained where she was till the bloom of her youth had passed. She might have found a hundred worse situations, she said, and she said truly. But down in that Welsh village lived a certain clear-eyed clean-limbed brave-hearted young doctor, just setting up in practice, and sorely in need of a wife. If Mary had accepted that gentle lady's modest offer?—well! Mary would have been what the other gover-

ness became—young Doctor John's wife, and both Mary and Doctor John would have been better for the arrangement. She would have suited him better than Mrs. John, who was of a high temper, and somewhat overbearing manners; and she would not have lost all her roses so soon, or have been so ready to adopt gloomy views of life, and to believe in the virtues of conventual rule. Poor Miss Mary! If she had only known under which casket lay her happiness, and where was hidden the talisman of her fate! And yet how easily it might have been!

If rich old Mr. Scroggs, worth half a million, had not paid such persevering and demonstrative attention to pretty Evelina at that very dinner-party where young Captain Blake had decided to propose, she might now have been the happy wife of the portly Colonel, instead of the faded spinster, angular and peevish, who passes half her time in bewailing her positive misfortunes, and the other half in lamenting her possible blessings had fortune but taken the other turning in her lane of life. She knew that Captain Blake—timid, poor, and proud—wanted but courage and uninterrupted opportunity, and she, on her part, desired nothing better than to bring matters to a crisis and whisper "Yes," as her echo to his "Do you?" But that hideous old Scroggs who never meant anything serious, must needs plant himself between them at dinner, and make such open love to her over the champagne, that all her plans were brought to naught. Her pretty eye artillery and liberal armoury of charms missed fire and fell harmless of their mark; the shot fell into the ditch when she aimed it at the tower, and neither ditch nor tower yielded. Captain Blake, who thought his hundreds no match against the old sinner's thousands, went off to Norway for the summer, and next season married Laura May whom he had met upon his travels, and who understood to perfection the art of angling, hooking, and landing desirable fish. And all this brought about because Mrs. A. asked Evelina and Mr. Scroggs to the same dinner, and forgot to organise her table with due regard to the best pleasures of her guests! If Captain Blake had been placed next the fair Evelina, what might not have been of happiness for both!

And if Aunt Susan had never given that memorable party of hers, or if her favourite friend had not walked home in the moonlight with her favourite niece? Ah me! the years of pain and agony, and hope deferred, and long unending strife of love and circumstance that would have been spared—the bitter anguish of the present hour—the solitude of the one, the fettered loneliness of the other! Oh! all that might have been now passing before my eyes, had love and circumstance agreed together! I see a home set in a fair place, with love and honour like sweet blossoming roots about its gates: I see a troop of little children, blue-eyed and brown-haired, noble, brave, and strong as the father, faithful, loyal, and loving as the mother—I see them standing there, their baby fingers knitting



together two souls with links stronger than death; I see two lives gently passed in love and good works—two lives softly blent into one great bond of truth and peace, making an exemplar of wedded bliss for future generations to quote and live by: I see all this in those dreamy words, "What might have been!"—but the visions pass, the dreams fade, the stern truth smites down those pleasant phantoms of the possible, and I see, instead, two suffering human hearts ruled over by desolation and despair. What might have been! what might have been!

And again: if that poor mother had not been struck with death when her friend went down on an ordinary friendly visit—if that illness had been deferred but a week or hastened but a week—what then? Then there might have been a motherless family abandoned and left to go down to ruin, and one lesson of human duty and God's loving-kindness to the desolate the fewer for the world to read. If Gustavus, too, had not come to Rosalinda's wedding, or if, coming, he had not fallen sick, and so been kept beyond his term, Rosalinda's sister would not have been Mrs. Gustavus, and a certain pair of soft gazelle-like eyes would not now be gazing curiously at life, with all too probable sorrow to many future beholders. And if Rosalinda herself had not gone to pay that Brighton visit, Edward, or George, or Frederick, or Charles, might have won the flower of price instead of Jacobus, and the world have seen another line and generation. If Jessie had put on her bonnet but half an hour earlier when she went one day, mournfully enough, to walk by the sea-shore, she would have met young Willie alone; they would have stopped and spoken, and the misunderstanding which had somehow sprung up like a sudden spectre between them, and which reached its culmination last night at the ball, would have been explained, and ultimately would have been lost in the traditional orange-blossoms and white veil. But Jessie sat and played idly with Fido instead; and the half-hour, lost, saw Willie packing his portmanteau for London, determined not to be fooled again. She would have been happier with him than she has been with that long Scotchman of hers; and Willie would not have gone to India to fall a victim to alcohol and caloric. What has crippled my poor young sister, and doomed her to a couch of pain and years of lonely suffering, but that one single pic-nic, arranged by chance, and by chance joined by her, when she over-walked herself, got heated, and then had the chill which all but killed her, and left her what she is now! What might not her fate have been, had she gone down into Kent before that third of July, as she intended, and so never rambled through the Loughton Woods and lost herself so far away from all the rest? Sadly those words stand now written up against her shattered life—"What might have been!" What a full harvest of love, and happiness, and health ruined for ever, lies like blighted grain in every letter!

If young Horatius had taken his beloved manuscript to the publishers on any day but the day on which the publisher's Reader had had a quarrel with his wife at home—that quarrel brought about, if one goes down to the origin of things, because he had supped on pork-chops the night before—very likely his verdict on the youth's first efforts would have been favourable, and the publisher would have taken his poem and paid for it like a man. The poetry was good, and Horatio had in him the potentiality of fame and riches; but under the malign influence of chance, embodied in pork-chops, he came to the actuality of poverty, despair, and suicide! Again: if he had called on his friend Atticus by the way home, and if he had heard his cheery voice ring out its "Never Despair," like a trumpet-call to manhood, and if he had drunk half a dozen glasses of his fine old port, do you think he would have bought that beggarly twopennyworth of laudanum to quench the fire of a masterly brain, and to still the throbbings of a noble, if too sensitive, heart? Not he! Had he turned aside for one brief half-hour, he might have been alive to this day, and in the foremost ranks of fame. The Might Have Been of his life was no ignoble theme—what was, was a lesson of hopelessness, cowardice, unmanly despair, and childish impatience—all because a certain man had a surcharged liver. Poor young Horatius!

If Tardius had asked for that consulship in Spain, a day sooner, my lord's secretary would not have pledged his interest to Prudentius just twelve hours in advance; and if my reverend cousin had preached that other sermon of his before my lord bishop, at the visitation, he would have got the vacant living he had applied for. But he chose the discourse on good works, which cut against my lord bishop's private views concerning the dignity of the order, and so lost six hundred a year for want of that natural clairvoyance which goes by the name of tact. I was sorry for my clerical cousin, and that pretty little girl down in Lincolnshire waiting to be married; but you cannot give a man natural clairvoyance when he is as blind as a beetle, and as obstinate as a mule: so the six hundred a year, with the pleasant parsonage among the roses, went into the pocket of a red-haired Welshman, who told my lord bishop that he held all right reverend fathers to be so many little popes, and gloried in forming one of the consistory of cardinals appertaining. The Might Have Been of my cousin's life was a very sweet and touching idyl, but the reality ended drearily somewhere down among the Essex marshes, with the pretty little Lincolnshire girl married to a captain of artillery, because papa and mamma disliked long engagements, and because my reverend cousin's clerical preferment seemed a thing not of this century.

In that kind of biography which is rather a leaf out of general history than the writing of one life, the Might Have Been of chances lies very thick. If Mr. Wortley, grave, fastidious, and

learned, had not taken it into his head to dictate sentimental letters to Lady Mary Pierrepont, it might have been that we should never have heard of inoculation, and that a great many unnecessary deaths and useless disfigurements would have been spared the young people of the last century. Also, it might have been "that the wicked wasp of Twickenham" would have died with fewer stings proceeding, and that posterity would have lost some witty but very cruel and unmanly rhymes. If poor Mrs. Thrale had not seen Piozzi standing at the shop-door, and had not spoken to him concerning music-lessons for her daughter, it might have been that she would have died of ennui and her children's coldness, and the society of the time would not have been torn to pieces with frantic horror of so ungenteel and debased a match; Dr. Johnson would not have written his famous Remonstrance; Baretti would not have penned his infamous lampoons; and human life would have lost the lesson which a brave little woman's preference of love to artificial distinctions, preached to it from the house-tops. If Nelson had never met that seductive gipsy Lady Hamilton, it might have been that a long line of lawfully baptised Nelsons would have sustained the family honour for generations yet to come; and then it might have been that, with family influence to stir up the lagging, and with family feeling to urge to that stirring, the lions at the base of the Trafalgar column would be now completed.

But the field is illimitable; and if we fly at all the game we might mark down, beginning with Adam and Eve, and ending with Disraeli's History of Events which have not happened, we shall not finish the subject under a volume; and then there might be, and in all probability would be, for the result—the rejection of this paper, and the world's enlightenment so far delayed.

#### VIOLETS.

SWEET is the legend of a happy soul,

Pacing, in dreams, the sward of Paradise;  
Above her hung fruits 'tinct with fiery flush,  
Around her blew flowers myriad in device.

Low was the clime, a twilight arched with stars,  
Long, arrowy lights on cedared hill and dale,  
Filled with a mellow atmosphere whose heart  
Breathed of myrrh and spice and garlingale.

She, pausing underneath the tree of life,  
Heard all its mystic branches palpitate,  
And a low voice:—"Take thou the fairest flower  
Between the eastern and the western gate.

And, rising up, she wandered forth amidst  
Lilies beloved in time by Solomon;  
And forest frankincense and wondrous blooms,  
Whose chalice were dyed with moon and sun.

Rounding her path, there glimmered in blue dusk  
Vast star-eyed blossoms, bright and marvellous—  
Great charms of streaked splendour; living flowers  
Lost to the fallen world and unto us.

At dawn the angel found her at the gate,  
Weeping, but looping in her vesture's folds  
Of all the gorgeous blooms of Paradise,  
Passionate violets and marigolds.

And lifting up her low eyes, dashed with rain,  
"I paced," she said, "between the east and west;  
Heaven's fairest flowers were subject to my hand,  
But I did gather what I loved the best."

Answered the radiant angel, "Sweet and wise,  
Thy tender care hath chosen the fairer part,  
Henceforth shall violets be loved of love,  
And marigolds refresh the tired heart.

"Awake!" And she unclosed her eyes to see  
The morning sunlight beating on the blind;  
And round her bed the breath of marigolds  
Swam with the violets' on the garden wind.

#### MEDIUMS UNDER OTHER NAMES.

WHEN was juggling a thing that was not, and when were there no prestidigitators in this lumbering old world of ours? Men with clean brisk fingers daintily tapering at the tips, supple-jointed, and with a marvellous amount of sensibility about the cushion; men with flexible palms, broad and yet compact, well hollowed in the cup, and with the large blue muscle of the thumb, soft, springy, and well developed; men with hands and fingers which, if viciously educated, would take to picking the pockets of a lay figure hung round with bells, and never stir the most loosely hung clapper of them all; but which would, if virtuously inclined, content themselves with forcing cards, bringing pigeons out of wine-bottles, and sending half a dozen half-crowns rattling into a glass box by no other means apparently possible than an invisible railway. Among the ancients and among the savages—in the rough old mediæval times and now, in this luxurious learned scientific and all-inquiring nineteenth century—whenever men have gathered together in companies there has been the juggler among them. Sometimes under a religious garb, as the "medicine-man," the priest teaching truths, or the pythonesse uttering oracles, one to whom the Great Spirit has given peculiar gifts and consecrated to the task of instructing men by bestowing an exclusive knowledge of divine things; sometimes as the magician, the professed trafficker with viewless spirits, good or bad, according to the moral nature of the man and the character of the tricks done, but viewless spirits nevertheless—things of supernatural powers and supernatural existence, which, if they did in truth haunt any man, would send him mad outright, or kill him with awe and horror; and sometimes, more simply, as the true juggler, the professor of hocus-pocus, who confesses that he does all his marvels by trick and sleight of hand, and who pretends to no superiority save what is found in keen sight, well-shaped fingers, a good memory, and untiring industry. It is of these last, by far the cleverest, and the honest men of the MEDIUM tribe, that I am now going to speak; and when one knows what has been done by mere dexterity of arrangement and quickness of hand, sundry miracles of the present time will sink into insignificance, and will be held as by no means to be compared with hundreds of acknowledged tricks,

about which was neither falsehood nor audacious pretence of communication with the dead.

Here is a glass of plain water, perfectly clear, limpid, colourless; hold it up to the light—you see nothing whatever but an innocent glass of spring water, without even an animalcule floating unconscious in the midst. Strike into it a glass rod or an iron tube. In a moment the plain water flashes out into innumerable crystals, and the glass is filled with brilliant prismatic spicula, glancing back all the colours of the rainbow. That is magic, if you like; natural magic; which is better than human. Another glass of pure water fresh from the spring—breathe on it gently, and it is no longer clear and pure but milky and turbid; another bit of nature's juggling very useful in its way. Do you see this piece of ice? Here, I press something down on it with my penknife; the ice bursts into flames, and the flames lick up the drops as they run. Again, I bring a lighted match to the surface of this block of Wenham, and there is at once an unmistakable bonfire, which burns until I put it out. I have another tumbler of quite clear water here. Gently I slip an egg into the tumbler, then raise my hand when it has slipped down midway, and bid it stop and float; it does stop, and it does float; and I hold up before my audience the admirable spectacle of an egg suspended in the water without hook, cord, magnet, or any other visible agent whatsoever. Why not? If my will can go into chairs and tables and make them walk and talk, why not into an egg to arrest its downward career? I have a slender-necked jar or bottle, bulbous in the body, contracted in the throat, yet comfortably located in that bulbous body is another egg, whole, sound, unbroken, but of such dimensions as could never possibly have passed through the neck. Yet it did. The bottle was not made over the egg, and the egg was got through a passage a full inch too small for it. How? Eggs are brittle things, and, so far as I know, not compressible: yet this mystery of the egg and the bulbous narrow-necked jar is true. I can light my candles by only pointing at them with a glass rod; I can pour a bucketful of water on to a heap of sand, and bring up the sand as dry as if I had taken it off Hampstead Heath on a windy day in March—a trick, by the way, made great use of by the Hindû jugglers, and also of life or death value in the ordeals of that enlightened people: the priests having the privilege of manipulating the sand. I can freeze water in a red-hot vessel standing close by the fire; I can dip my hand into water, and bring it out again as dry as if just wiped with a Baden towel—another Hindû trick known to the West. I can pour water on to a sheet of paper, and instead of wetting the paper, it shall run about in little balls like crazy quicksilver. A dead twig or a branch of summer beauty, green and leafy, I can fumigate with a little sweet-scented incense, and in a short time bring it you again white and sparkling with the crystallisation of hoar-frost. By merely shaking an uncorked bottle of oil, I can produce the love-

liest moonlight effects of light—very like the luminous hands in present vogue. I can walk on hot metal plates, if you give me time beforehand for the preparation of my feet; and I, and M. de Boutigny, and some others, can boldly plunge our naked arms into glowing vats of fiercely boiling metal, which only feels to us like liquid velvet. All this I can do, by the aid and teaching of natural magic, and without any help from the "dear spirits." But I can do much more than this: as you will see if you go on.

Even so long ago as Chaucer's time, when I was a jocator or jouggour, I was an adept in the art of sleight of hand. I could cut off a boy's head as he lay on a table, and you should see the blood on the platter, and the livid hue of death on the face, as the jaws gaped and chattered in the last throes: when, with a "presto! pass! hey cockalorum flegig!" I could put it on again, and the grinning jackanapes be none the worse; I could thimblewig as well as the best of the modern professors on Ascot Heath, pass cards at my will, and make the ace of hearts a live pigeon; I could make an egg dance a hornpipe indifferently well; I could change a groat into a tester, and a tester into a noble, if I had such a thing about me: yet somehow I never got the richer for the transformation. I could tie innumerable knots in a handkerchief, or you could tie them yourself, or as many of you as chose; but at the word of command they should all unloose themselves and fall out. I could give you ale or beer, sherris or sack, all out of the same barrel, and in larger quantity than the said barrel would hold without jugglery intervening—so Master Houdin's trick of the inexhaustible bottle, clever as it was, had its forerunners. I could cut off my nose; thrust a padlock through my cheek and turn the key upon myself to show you it was all right, and no deception, my masters. I could eat fire, and breathe it out again; swallow knives, pull a rope through my nose, and draw countless yards of ribbon out of my mouth. I could swallow a tin pudding, a yard long; make three bells come where you could all see for yourselves were only two before, and no possibility of a third; I could make a card vanish and turn up unexpectedly in another place; I could juggle you many a pretty picture beyond all chance for any of your duller wits to understand how. Could you tell me how I brought into my lord's hall, that water—seemingly fair living water—in which were boats with men rowing up and down? Or how I conjured up the show or presence of that grim lion? and of that ample field with posies growing rich and lush among the grass? How did I make the vine grow up in a moment, bearing white and red grapes, real to the touch and sweet to the taste? How did I build you a goodly castle with actual stone, and at a word make all disappear as swiftly as it had come?

A "learned clerk," a friend of mine, to amuse his company, made a "forest full of wild deer, where might be seen a hundred of them slain, some with hounds and some with arrows; then the hunting being finished, he caused a company

of falconers to appear upon the banks of a fair river, where the birds pursued the herons and slew them, and then came knights jousting on a plain"—all by the noble art of jugglery and natural magic. Do you not believe me? Read Strutt's Sports and Pastimes, and then you will find that I have not boasted, and that when I merely clapped my hands together, "all was gone in an instant." I don't say that all this was not by a kind of magic lantern known only to the initiated. True, Kircher invented the real magic lantern as we have it now, but we were not all fools before Kircher came, and we had a pretty little store of optical secrets among us, and at least knew the effects of cylindrical mirrors, and the principles of reflection and refraction. Then people were so thick-witted and so superstitious! (almost as superstitious as they are now), and were so ready to cry magic and the devil, that if we ran more danger of being spitted and roasted as magicians, we got off with less criticism and far less chance of detection. Sir John Mandevill, a few years later, saw something of the same kind of thing as what I and my friend, the learned clerk, did in Chaucer's time. There were jugglers at the court of the great Chan, who made night at noon, and noon at night; who brought in fair damsels, heaven knows whence or how, and caused boar hunts and knights jousting, to appear: the splinters of whose spears flew over the hall.

In 1579, I went down to Ashwell Thorpe, where I performed a trick—I cannot do it now, I wish I could—like the famous mango trick of the Hindûs. I set an acorn in the midst of the hall, watered it, watched and tended it, and in a few moments caused it to grow up a goodly tree, bearing real acorns—I appeal for testimony to the swine of the period—which acorns ripened, fell, and were devoured, according to the laws of acorn life. Two stout woodmen with difficulty cut down this tree, the chips of which flew far and wide about the hall; but at my command my two green goslings carried away the fragments without any difficulty. Which is exactly the kind of thing some Hindû juggler is doing at this very moment somewhere in British Hindustan. A ballad was made on this trick of mine, which, lest you have not got Bloomfield's History of Norfolk by you, I will transcribe:

THE BALLAD OF ASHWELL THORPE, MADE IN  
SIR THOMAS KNEVET'S TIME.

Once there lived a Man, Deny it they that can, Who liberal was to the Poore; I dare boldly say, They ne're were sent away, Empty-Handed from his Doore.	There was a Gentleman, From London City came, The country for to see, And all in the Pryme, Of jovial Christemas Time, There merry for to be.
When Misers in Holes crept, Then open House he kept, Where many then did resort, Some for love of good Beere, And others for good Cheere, And others for to make Sport.	This Londoner did say, If the Gentry would give way, A Trick to them he w'd show, That an Acorne he would sett, If they would please to ha'te, Which to a great Tree should grow.

The Acorn he pull'd out,  
And shewed it all about,  
In his Hand then he took  
it agayne,  
In the presence of them all,  
In the middle of the Hall,  
He sett downe the Acorne  
playne.

While one could drink a Cup,  
Then did an Oake spring up,  
Which was so huge and  
tall,  
With Arms it so put out,  
And Branches all about,  
That it almost fill'd the  
Hall.

This Oake then did beare,  
Which was a thing most  
rare,  
Acornes both black and  
brown,  
For which the Swine did  
busk,  
And they did loose their  
Husk,  
As they came tumbling  
down.

This great Oake there did  
stand,  
To the View of every Man,  
Who saw, it was so  
playne,  
But Rooome then to afford,  
To bring Supper unto Bord,  
They wish't it gone  
agayne.

Then lowly he did call,  
And Two came into the  
Hall,  
Who were both stout and  
strong,  
And with the Tools they had,  
To work they went like mad,  
And laid this Oake along.

This is precisely the mango trick of the present day. The Hindû juggler takes a dry stick, plants it in a pot with some earth and water, makes his invocations, and covers it up. In a short time he removes the cover, and, behold, the mango has sprouted. Again he covers up, and again he looks—the sprout has widened to a full-grown shoot, with expanding leaves and forming blossom. Again—the blossom has now fructified, and the petals lie withering on the mould. Again—the fruit is fully formed. Again—it is ripening; and now, again, and for the last time, the cover is removed, when the mango, fully ripe, is plucked from the tree fully grown, and gracefully handed to the Mem Sahib to taste. In another moment the mango-tree is the withered stick it was in the beginning. Yet this is professed jugglery, a mere delusion of the senses by manual dexterity, such as the juggler of Ashwell Thorpe achieved when he planted his acorn and reared his oak, and caused the two goslings to carry away the chips which the couple of stout labourers had made.

Another Hindû trick is the girl and the basket. A circle is formed, say of soldiers, standing thick and serried; the juggler, the child, the basket, Mem Sahib, and Mem Sahib's friends are in the centre of the circle; and the whole

I'll tell you here no Lye,  
The Chips there then did  
flye,  
Buzzing about like Flyes,  
And Men were forced to  
ward,  
Their Faces well to guard,  
For fear they sh'd loose  
their Iyes.

He bade them then behold,  
And ev'ry one take hold,  
This Oake for to carry  
away.  
And they all hold did get,  
But c'd not stirr't a whit,  
But still along it lay.

He said they had no  
Strength,  
Which he would prove at  
Length,  
For it sh'd not lye long  
on the Floor,  
Two Goslings young and  
green,  
They then came whewting  
in,  
And carried it out of the  
Doore.

Then gone was the Oake,  
That had so many a Stroke,  
Before that it fell down,  
Thus as it grew in Haste,  
So quickly did it waste,  
Not a Chip then could be  
found.

This Story is very true,  
Which I have told to you,  
'Tis a wonder you didn't  
heare it,  
I'll lay a Pint of wine,  
If Parker and old Hinde,  
Were alyve that they w'd  
swear it.



scene, remember, takes place out of doors. The juggler, after going through his less exciting tricks—keeping up a shower of balls with his hands while he keeps up a shower of rings with his toes, perhaps at the same time balancing a loose stick tower on his chin—building up his joisted pole on his forehead, up which the tramed goat runs and stands with all four feet on the top, on a space not half so large as one's hand—piling four or five waterpots on his head, with a girl standing on the top of all, with which singular head-dress he dances about the circle juggling his balls as usual, or stringing beads on a thread with his tongue—after holding a staff in his waistband and letting a brother juggler swarm up it and lay himself all abroad on the top, legs and arms flying to all four quarters, and the body balanced only on one part of the stomach—after these and other kindred displays he comes to the finale of all: the girl and the basket. The juggler calls the little girl to him and begins to play with her, at first gently, then a little more boisterously, until at last he thrusts her roughly under the basket, and tells her he shall keep her there till she is good. The little girl begins to whine and remonstrate from underneath the basket; the juggler gets angry, scolds her, and tells her to hold her tongue, else he will whip her; but the little one is unappeasable, and the quarrel goes on, increasing in intensity, until at last the man, in a paroxysm of anger, draws his sword and thrusts it wildly into the basket. The screams of the child are heartrending, her yells and cries agonising; but the juggler stabs and stabs again, and works his sword about the wickerwork in uncontrollable and fiendish fury. Then, the child's voice ceases, and just a few heavy sobs are heard; then, some fainter moans, fainter—fainter—as the last gasps of a murdered child would be—and then, all is still. The juggler pulls his bloody sword from the basket, wipes it, and composedly salaams Mem Sahib and her friends, who are generally in a state of hysterical distress; sometimes, indeed, the soldiers are with difficulty restrained from tearing the man to pieces, especially in one case known to me, when the captain of the company, himself quivering in every limb with horror and agitation, had actually to defend the juggler from the excited men. How it might have fared with him Heaven only knows, but that on his giving a peculiar cry, the little girl came bounding and laughing into the circle—coming from behind the soldiers—though every man was ready to swear that she had not passed him, and could not have passed through the thick ranks anywhere. Now, how is that trick done? It is nothing but jugglery from first to last—as much mere jugglery as Torrini's trick of sawing one live page into two, or as Robin's of pulling one pigeon into two; but, mere trick as it is, it is undiscovered yet, though hundreds of shrewd hard-headed unimaginative and scientific Englishmen have seen it, thought about it, tried it—and been baffled—for half a dozen generations.

We must rank amongst the more legitimate

jugglers the rope-dancers and tumblers of old times. In Elizabeth's reign they all went together, classed with "ruffians, blasphemers, thieves, vagabonds, heretics, Jews, pagans, and sorcerers:" yet the old lioness liked looking at them well enough; and in Laneham's description of the Sports of Kenilworth, he speaks of "a man so flighty that he doubted if he was a man or a spirit," and could not tell what to make of him, save that he might guess his back to be "metalled like a lamprey, that has no bone, but a line like a lutestring." Before then, Queen Mary and Cardinal Pole, reviewing the royal pensioners in Greenwich Park, laughed heartily at the "pretty feats" of a tumbler; as generations ago Edward the Second had laughed, who was signally amused by a fellow who fell off his horse, and vaulted on his back again, as quick as you might see. Froissart speaks of a marvellous bit of rope-dancing, quite as good as Blondin's, if not better, on the occasion of the entry of Isabel of Bavaria into Paris. "There was a mayster came out of Geane; he had tyed a corde upon the hyghest house on the brydge of Saynt Michell over all the houses, and the other corde was tyed to the hyghest tower of Our Ladye's church; and as the queene passed by, and was in the great strete called our Ladye's strete; bycause it was late, this sayd Mayster, with two brinnyng candelles in his handes, issued out of a littel stage that he had made on the heyght of Our Ladye's tower, synginge as he went upon the corde all along the great strete, so that all that sawe him hadde marvayle how it might be; and he bore still in hys handes the two brinnyng candelles so that he myght be well sene all over Parys, and two myles without the city. He was such a tumbler that his lightnesse was greatly praised."

Another rope dancer in Edward the Sixth's time excited great wonder here in London. He stretched a rope as thick as a ship's cable, from the battlements of Saint Paul's steeple down to the floor before the house of the Dean of Saint Paul's, where he fastened it with an anchor; and down this rope he came, "his head forward, casting his arms and legs abroad, running on his breast on the rope, from the battlements to the ground, as it had been an arrow from the bow, and stayed on the ground." Then he went to the king and kissed his foot, and then swarmed up the rope again, halting midway to play "certain mysteries," as casting one leg from the other, and tumbling and dancing on the rope. Then he tied himself to the cable by his right leg, "a little space beneath the wrist of the foot," and hung by that leg a long while; then played more mysteries; and so up the rope again to safety and the high steeple of Saint Paul's.

Very clever, too, were the egg-dancers ("hoppersters" in Chaucer's time), and the sword-dancers, and the vaulters, and the entortillationists. At the end of the last century there was a magnificent vaulter, an Irishman, over six feet in height, admirably made, and only eighteen years old: he could jump over nine horses

standing side by side, with a man seated on the middle one; he could jump over a garter held fourteen feet high, and kick a bladder at sixteen feet; and at his own benefit he leaped over a machine like a broad wheeled waggon with a tilt. He had no spring-board, and jumped from an inclined plane of three feet. Strutt saw him, and examined his starting-place. Poor fellow! He sprained the tendon of his heel at last, so his fine vaulting got a little damaged. Joseph Clark, who lived under Charles the Second, and died in King William's reign—a tall thin well-made man—was one of the great entortillationists of the past. He could make himself up into all manner of humps and deformities, and dislocate his backbone in the most shocking manner; plaguing the tailors to death by going to them as a slender well-conditioned man, and receiving his clothes as a crabbed and crooked old hump-back, with humps sticking out all over his person, and not a joint in its proper place. Then there was Powel the fire-eater, whom Strutt saw eating burning coals brought from the fire, and putting a lighted match into his mouth, blowing the sulphur through his nostrils. He also carried a red-hot heater round the room in his teeth, and he, as Richardson had done before him, broiled a piece of beefsteak on his tongue. While the meat was broiling, one of his assistants blew the charcoal that lay under his tongue, to prevent the heat from decreasing, and in a short time the beef was thoroughly cooked, and not too much gravy remaining. By way of a conclusion, he made a composition of pitch, brimstone, and other combustibles, adding a small piece of lead; he then melted it all in an iron ladle and set it on fire. This was his "soup," and he spooned it out of the ladle with an iron spoon, and ate it, boiling and blazing as it was. Another worthy ate stones and cracked them, or was said to do so, and appeared to do so; he probably juggled them away instead.

Then Clench, a Barnet man, was a wonderful imitator of all things, living and dead. He was in Queen Anne's time, and imitated horses, huntsmen, and a pack of hounds, all at once; he was great in drunken men and shrill old women, but greatest of all in bells, flutes, the double cantrell, and an organ with three voices. He had a rival, one Rossignol, the foreshadowing of Herr Joel, who sang all the notes of all the birds, and played on a stringless violin, making the music with his mouth. But some of the more curious found out that he had a small instrument concealed within his lips when he did this, so his trick lost value. Taught animals—dancing bears, learned pigs, the "ball of little dogs," which personated fine ladies and their beaux so wonderfully well, canaries that made themselves into grenadiers, and shot the deserter canary at the word of command (this was at Breslaw's), clever horses that could do everything but talk, a rope-dancing ape as good as human—all these came into the juggling department; so did that brave little girl at Flockton's, "a noted but clumsy juggler," who appeared

on the stage with four naked swords, two in each hand, with which she danced with incredible swiftness and dexterity; turning the weapons now out, now in, sometimes thrusting them into her bosom, sometimes holding them over her head, then dashing them down by her side, at last stopping suddenly after ten or fifteen minutes of this perilous work, apparently never a bit the worse. Sword-dancing was more common once, than it is now. Even a child of eight danced among the points of swords and spears at Bartholomew Fair in Queen Anne's time. And one of the Sadler's Wells company said that all who went to his place should see "a young woman dance with the sword, and upon a ladder, surpassing all her sex."

One of the most wonderful (if true) bits of jugglery that I have met with is to be found in the Southern Literary Messenger of 1835, from a manuscript of D. D. Mitchell, Esq., and purporting to be an account of what the Arickara Indians can do in that way. In 1831, Mr. Mitchell and some friends, travelling up the Missouri, lost their horses near an Arickara village. Now, the Arickaras, says Mr. Mitchell, are about the worst set of red men going, with all the vices and none of the virtues of their race; but they don't murder those whites who throw themselves on their hospitality: the reason being, that they once murdered a white man, and his ghost haunted their village ever afterwards, and frightened away the buffaloes. The travellers therefore took lodgings in the village itself, and the tribe all turned out to do them honour. And one of their ways of doing them honour was to show them what their band of "bears," or "medicine-men," could do. In a wigwam sat, in a circle, six men dressed as bears; the spectators standing round them, and the white men being given the best and nearest places. For a few moments the bears kept a mournful silence, then they bade a young brave go to a certain part of the river-side, and bring them a handful of stiff clay. The clay was brought, and the bears set to work to mould it into certain forms—buffaloes, men, and horses, bows and arrows—nine of each kind, as by the true bear recipe. They then placed all the buffaloes in a line, and set the clay hunters on the clay horses, with their bows and straw arrows in their hands. They were about three feet distant from the game, and in parallel lines. When marshalled, the elder bear said: "My children, I know that you are hungry; it has been a long time since you have been out hunting. Exert yourselves to-day. Try and kill as many as you can. Here are white persons present, who will laugh at you if you don't kill. Go! Don't you see that the buffaloes have already got the scent of you, and have started?" At the word all the buffaloes started off at full speed, and the men after them, shooting their straw arrows from their clay bows, so that the buffaloes fell down as if dead; but two of them ran round the whole circumference of the circle, about fifteen or twenty feet, and one received three and the other five arrows before they fell over and

died decently, as clay buffaloes should. They always kept apart at the distance of three feet, at which they were originally placed. When the buffaloes were dead, said the bear to the hunters, "Ride into the fire!" a small fire having been made expressly for the experiment in the centre of the hut. They set off as before, but stopped at the edge of the fire. Said the bear angrily: "Why don't you ride in?" and then the riders beat their horses with their clay bows, and so they rode into the flames, and fell down, and were baked to powder. Then, the bears took the powder from the floor, and cast it abroad to the four winds of heaven, at the top of the lodge. Which may be taken on the whole as a very pretty bit of jugglery indeed.

There are some capital anecdotes of sleight of hand in the last new book on the subject put forth—the Memoirs by M. Robert-Houdin, Conjuror, Mechanician, and Ambassador. But almost the best of all, as an instance of clever scheming and neat prestidigitation, is that anecdote of how Torrini juggled the Cardinal's unique and priceless Breguet watch into the Pope's holy pocket, after having first stamped it to pieces and brayed it to gold dust in a mortar—that valuable watch about which there could be no mistake or delusion, for there was not such another to be had anywhere. Yet Torrini had caused its fellow to be made expressly for this experiment; which shows at least what these juggling men will do when the humour takes them. Much, too, is said in that volume of the aid and assistance given to juggling by ventriloquism; and much of the many clever automata, both the tricky and the legitimate, which have helped to bewilder men's minds and disturb the relations between the real and the false. There was Vaucanson's flute-player, copied from Coysoix's marble statue of the faun, which was of the true or legitimate kind; there was his mechanical duck, which, though marvellously clever, was of the tricky or juggling order—the said duck not performing all that it undertook to do, but deceiving folk's eyes by a crafty substitution and admirable pretence. Then, there was his famous loom on which a donkey worked cloth; made in revenge for the bad treatment of the Lyons weavers, who had stoned him because he wanted to simplify the ordinary loom (at the present day the weaving wonder is Bonelli's loom, worked by electricity); then, there was his asp which fastened on the actress's bosom with a hiss and a spring, sickeningly real; likewise, his endless chain, at which he was working when he died. Then, there was the Prussian Koppen's musical instrument, the Componium exhibited in 1829, which Componium was a mechanical orchestra, all kettle-drums and big drums and little drums, tambourines and fifes and flutes, triangles and cymbals, and what not; and there was the chain of rings all enclosed in each other, which, if you blew upon, though never so lightly, fell to pieces of its own accord, to the astonishment of all beholders. Then, there were the rhyming automaton, and

the speaking automaton which got to the length of real sentences, and might, perhaps, with faith and patience, have at last been brought to intelligent conversation—who knows? And by-the-by, that speaking automaton was the most ingenious of all, but susceptible of great improvement, owing to certain quite modern mechanical and scientific advancement; and there was Robert-Houdin's own automaton, that drew so ominously—for the pencil broke in the act of tracing the figure of a crown for his dispossessed heirship, the Count of Paris. Will the count ever fulfil the old king's remark, and, "as he has learned to draw, finish the crown for himself"?

Houdin's system of second sight, too, was as clever as it was bold. The trick exists now, as any one may see who chooses to pay M. Robin an evening visit at the Egyptian Hall, Piccadilly, and hear Madame detail the things held in his hand, one after another, and always accurately, according to the preconceived system of verbal signs. (M. Robin's is a very admirable entertainment, and he is an excellent conjuror, who to surprising dexterity of hand and eye, unites a very prepossessing appearance and address.) How clever, too, was that handkerchief trick at Saint Cloud!—how apparently without preparation, and only due to the inspiration of the moment!—what spiritualist Mediums could do anything half so striking? At that séance at Saint Cloud, in 1846, Robert-Houdin surpassed himself. Borrowing six pocket-handkerchiefs from the "illustrious" company, he desired several persons to write on cards the names of places whither they desired the pocket-handkerchiefs to be transported. Of the mass written, Houdin desired the king to select three; on one was written, "On the dome of the Invalides;" on another, "Under the candleabra on the chimney-piece;" on the third, "In the last orange-box of the avenue." The first was too distant, the second too easy, the third was the right one. Yes, in the last orange-box of the avenue, well under the roots of the tree. Immediately messengers were sent off by the king to see that no one played tricks with the chest, and then the royal servant was commanded to go and open the side of the orange-tree box, and see what he could find. And there, sure enough, he found an old rusty iron casket, quite under the roots of the tree, which casket he brought to the king, no one touching it by the way. Then Houdin lifted up the bell of opaque glass under which he had put his packet of handkerchiefs, and, lo! they were gone, while in their stead was a pretty little white dove, with a rusty old key fastened to a ribbon round its neck. The king took the key, opened the casket, saw first a paper or bit of parchment with some nonsense on it by Cagliostro, then a paper parcel sealed with Cagliostro's seal. This paper parcel he untied, unsealed, and opened; and behold the pocket-handkerchiefs borrowed not half an hour before!

Now, how came they there? It was jugglery, but mighty pretty jugglery, and very much out



of the common, as people say. Then the Duchess of Orleans brought a green case, which was not to be opened, and the contents of which Emile, by virtue of his second sight, was to reveal. Of course Houdin opened it with a rapid, unseen gesture, gave the password to Emile, and received, as the reward of his dexterity, the diamond pin, with its stone surrounded by a garter of sky-blue enamel, which was its enclosure. It was Houdin, too, who, at the time when magnetic trances and cataleptic phenomena were at their height, invented the trick which it pleased him to call "Etherial Suspension," wherein he knocked off, one by one, the frail supports on which he had placed his youngest son, and left him seated on nothing, apparently suspended in the air in a state of cataleptic trance—a sight which never failed to bring down on the juggler's good-looking head, a storm of maternal indignation, and a shower of twopenny post letters, threatening prosecution and the police. And it was Houdin who improved on Philippe's trick of producing five or six huge glass bowls, with live gold fish swimming about, from nothing but an empty shawl wrapped round his body. What are the luminous hands in the carefully darkened room, or under the carefully covered table, to this, or to the heap of feathers brought out of the hat of an offending spectator—feathers in such quantities that they cover up a boy kneeling on the stage? Look at the tin cases flung out of that hat—enough to set up a tinman's shop; at the bouquets of flowers—a whole Covent Garden Market full; at the toys, the pigeons, rabbits, and ducks—all tossed out of a single black hat! Our mediums are bunglers. An ordinary fair-day conjuror could beat the best of them.

What can the Arab jugglers do? They are noted men in their trade, and are not unfrequently quoted by the superstitious as possessing more knowledge than is good for them, and as having a more intimate connexion with the Powers of Darkness than they choose to own. They eat glass and nails and thorns and thistles (the great prickly leaves of the cactus one of their grand feats); and they strike their arms, and the flesh opens and bleeds, and they strike again and the flesh closes and the blood ceases; they leap on the edge of sabres and don't cut their feet; they walk upon red-hot iron and don't burn their feet; they lie all along sharp sabres; and they eat snakes and scorpions; and all this they do accompanied with frautic gestures and mad excitement, so that the grain of jugglery bears a treble harvest of credulity, and the senses of the spectators are confused. It does not belong to this present paper to explain, by Houdin's method, all the arts and manœuvres of these mad Arab Marabouts; but it is enough to say that they are all to be reduced to simple juggling tricks, or the crafty application of some not commonly understood chemical and mechanical secrets. So far as we have gone yet, we have come to nothing miraculous or inexplicable anywhere. Quite the contrary. The most apparently miraculous things are all getting explained

away, one by one, even to the cardboard stomach of the self-sabrer, who, when he seemed to pass the sword right through his abdomen—for was there not the blood to testify? and was he not a lean man, and with no superfluity of abdominal muscles?—was yet found to have done nothing more wonderful than pass it through a leathern scabbard led across a cardboard front, in which was a small sponge filled with blood: the real abdomen being all the while comfortably (or uncomfortably) braced up against the spine, and in no danger of anything save inflammation from over-pressure. This was a very clever trick, possible only to an extremely lean person like the self-sabrer—the invulnerable, as he was called. Sometimes, indeed, physical peculiarities aid a man in performing unique tricks; that is, tricks possible only to himself, and the few exceptionals like himself. Like the sabre-swallower with his enormous gullet, which could take in an egg and gulp it down, without cracking it; or like the pug-nosed invulnerable before mentioned, who, while tricking the public with a juggle, performed a real feat when he thrust knives up his nostrils without hurting himself, because his nostrils were so wide and flexible. These cases are rare, but when they do occur they are never inexplicable or out of nature as the credulous would have us believe.

Yet, with all the evidence before them of the cleverness of jugglers, and the dexterity with which deft of hand can deceive the wisest—with all the mass of evidence of frauds which have been discovered, both pious and impious—people go on believing in miracles, and the "possession" by unseen spirits of carnal-looking mediums. Why, the latest miracle of all, is the old stigmata medium; the medium with the large white-skinned arm on which the spirits scrawl blood-red letters in a very bad hand, and looking marvellously like an earthly scratch with a material pencil! This flesh-writing is of no recent date. The Oxford Council of 1222 crucified two "naughtie fellows" at Arborberie for feigning the stigmata; but St. Francis of Assissi was canonised for his fraud two years later—as a compensation, probably. The Dominicans who got caught in false flesh-writing tricks at Berne, and Maria da Visitação who disgraced herself in the same way at Lisbon, brought the fashion into temporary disrepute for a long long time, until lo! it starts up again in the Irish revivalist who had "Geasus" written over her stomach, and in the medium who bares his arm to show a scrawling "John" scratched there. What believer in the power of Revivals would doubt the heavenly handwriting of the one (never mind the spelling); and what enthusiast in the cause of mediumship and spiritualism would question the ghostly origin of the other? O! how strange it is, that with the collective knowledge and advancement of the ages for his guidance, a sane man can witness the marvellous dexterity of a modern juggler who confesses that all he does is by fraud of sense and mechanical combination, and can then accept the "spiritualism" of a bungler, who cannot speak



tolerable English, and whose perpetually-failing tricks are of the lowest and most explainable order of legerdemain known.

### RUSSIAN TRAVEL.

#### SERFS OF A VILLAGE IN THE INTERIOR. A LOOK ROUND THE CHURCH.

IN outward expression the Russian serf is a mere clod of the valley. His dress is seldom varied. A little round low-crowned black felt hat, with narrow turned-up rims, covers the usual profusion of brown or carrotty tangled locks, which are sometimes parted in front, and cut straight at the neck. Every serf I have seen, who had reached manhood, had a beard, whiskers, and moustache, untouched by razor or scissors, so that most of these natural beards were magnificently long, rolling in soft curls, or spreading and bushy.

Beards are in Russia the peculiar prerogative of two classes only, but those the most numerous if not the most potent—serfs and priests; all other Russians crop and shave. Government officials of all kinds—and they are a host—gentlemen, barons, and soldiers, will not allow a hair to be seen, unless it be an imperial, a royal, or a Napoleonic moustache on the upper lip. Beard is the mark of servitude and priestcraft, and is, therefore, abhorred by the “respectability” of Russia. Count Pomerin’s serfs were profusely hairy under their hats, were dressed in loose, often ragged, coats of grey, brown, or black felt, or in cloth, coarse as “herland heather,” reaching a little below the knees, and held together at the waist by a belt, like a narrow horse-girth. Under the coat would be found either a striped cotton, or plain linen shirt, of the coarsest material, called “crash,” sometimes used for kitchen towels. Trousers of the same material were stuck into brown or grey felt boots, and the toes within the boots would be wrapped round with a coarse linen rag in lieu of stockings. On their hands the serfs wear fingerless leather mittens; and in the girth-belt, on the right hip, carry a short-handled axe.

After passing through the crowd of serfs, we proceeded down the hill, crossed a morass which caused the horses some trouble, and then over a low wooden bridge, spanning a frozen stream, passed to the outskirts of the village of Evanoffsky. The peasants, who followed listlessly, sauntering, and silent, gradually vanished into their wooden huts. These thatched village huts are so low, that one wonders how such well grown men stand up in them, especially as their walls are sunk at all manner of angles off the square. The gables face the street or road; no door is visible, but there is a large wooden gateway next the house, and a small door leading to the dwelling, somewhere in the rear. The gateway is for horses and cattle, carts, &c., and the allotment of each peasant is fenced in from the road by a close high paling, which extends to the next hut. These allotments being of considerable breadth, a village spreads over a great space of ground.

In some parts of Russia the huts have a low under story, for sheltering cattle during winter. It admits horses, cows, sheep, pigs, goats, and poultry. The flooring is open, and the animal heat from so many bodies, ascending to the inmates above, helps to keep them warm. In the summer, the quadrupeds go to the field, and the bipeds above take possession of the vacant cellar as the coolest place for the hot weather. A trap-door admits from above to this ground-floor, and a long sloping board outside, with cross pieces of wood nailed on it, like the temporary ladders used for building purposes in England, is the way out into the open air. In the villages belonging to Count Pomerin, the cattle of the peasants are housed in outbuildings immediately adjoining the low huts, the communication between them being always open. It follows that the men and women and the cattle live very much on the social principle, and have all things in common. I saw cow and horse dung built up three or four feet high from the ground, and one and a half feet thick, all round the huts, to keep out the coming winter frost. What windows I noticed, were mere pigeon-holes.

The street or road between these habitations was fully six times as broad as Cheapside in London, and a double row of tall trees ran down the centre, forming, no doubt, a cool and pleasant promenade in summer. Be it remembered that this was no roadside village, neither was it an outskirts to a town, but a genuine Russian feudal village, or as the Scotch would say, “clachan,” a long way from any public road or corporate town, embosomed in the heart of a large valley, between immense regions of forest and the rolling plains.

After a long ride, we reached the church. It seemed to stand in the centre of the village; and the other long lines of mud streets, like the one we had passed, radiated from it as a centre. It was a very large and handsome new building of stucco brick, with a Corinthian front, and constructed—as all Russian churches are—in the form of a cross, with gilded domes, cupolas, minarets, and two immense belfries, each containing one large and six small bells, fourteen in all, which were now keeping up a most atrocious jangle. Over the front entrance was at one end a very fairly executed painting of the last supper, and at the other a picture of some saint’s story which I did not understand. All the architectural designing and outside decoration was the work, I was told, of a serf belonging to the place. The church was open. It happened to be a Saint’s day (St. Vladimir, I think), and the count, with his party, including myself, entered the sacred edifice. We were not very long in it, the count and the other Russians of our party getting very swiftly through their religious observances; but the religious faith and observances of any people have a powerful effect in the formation of their character, and what one sees of the Greek Church in its practical bearing on the Russians is worth note.

This Greek Church is a schism from the Roman Catholic, or the Roman Catholic is a schism from the Greek; at all events the one split into two, on the elevation of Gregory the Sixth to the patriarchal chair of Rome. Before that time the four patriarchal chairs of Rome, Alexandria, Jerusalem, and Constantinople, had been independent, the one of the other, and each patriarch ruled in his own division; but squabbles had been going on between the patriarch of Rome and his brother patriarch of Constantinople, for the supreme headship of the whole Christian world. The two grand divisions which to this day are maintained—the Eastern or Greek, and the Western or Roman Church—now present so many points of similarity that a common origin is evident, and so many points of dissimilarity that the impossibility of any united action is equally evident. The Greeks have no purgatory, their priests must all be married, the Emperor is head of the Church in the same sense as the Queen of England is head of the Church of England and defender of the faith, and each diocese has a supreme patriarch who is only supreme in his own district. It is to the especial honour of the Greek Church that it has not been intolerant of other creeds, has not persecuted with fire and faggot, and at the present time allows in Russia every form of religious belief to be publicly followed by strangers and foreigners. But no proselytising is permitted. The great defect of the Greek system is the almost total exclusion of moral teaching. All is display of ceremony.

Service was being performed when we entered the church by four long-haired priests, attended by their clerks, and robed splendidly in sacred vestments of cloth of gold, with chains of gold and crosses hanging from them. The services consisted of chantings, genuflexions, crossings, and readings from a book of prayer; the voices of priests and assistants rising and falling the whole pitch of the gamut at a word, running in a low monotonous tone for a few seconds, then bursting afresh into a high key for a word or two, and then sinking into a mumble of inarticulate sounds. Immediately behind the popes (all priests are called popes in Russia), and facing the entrance, was a raised platform or dais, extending across that part of the church; with wings and side doors, not unlike the stage of a theatre. In the centre of this stage, stood the altar, around which were blazing a large number of wax candles. At the side-wings, were images and pictures by the dozen. A small rail, with an opening in the centre, separated this altar, and its attendant holy images, from the main body of the building.

The audience was pretty numerous, chiefly composed of women, many of whom carried babies, and were getting themselves crossed and sprinkled with holy water by one or other of the priests as they passed. There was not a single seat in the church; all worshippers were standing, bending, bowing, prostrating, and diligently crossing themselves. The

prostrations were complete, to the touching of the cold flags with the forehead, and the kissing of the ground. A few reading-desks were placed here and there about the church among the people, and on each lay for study a small picture of some particular saint. The one I examined was a miserably mean representation of Joseph and Mary, with a child between them. On these desks beside each of the pictures, lay a plate for the reception of money, and there was a stand for tapers and candles. The poor devotees crowded to kiss the pictures, made their children do so too, and when the children were babies held the pictures to their lips. After a time the performing priests retired behind the side-scenes, and reappeared on the stage beside the altar. Then, was heard a choir of very good voices commencing another part of the performance, and now, bending, crossing, and prostrating were renewed with added energy. During all this time the people were going and coming, passing and repassing, through the church, as they sought out the particular saints' pictures before which they desired to perform their devotions. No one seemed willing to rest for a single moment. Wax tapers and candles were being sold near the door, varying in price from three kopecks to many rubles. I am told that the priests derive a considerable revenue from the chandlery trade—first selling their candles for sacred purposes, and after they have burnt for a short time, putting them out to be resold for common use.

On this and on many other occasions, I did not hear one syllable of preaching or homily reading, nor one hint of the moral precepts of Christianity.

At Easter, there is absolution given to the Greek Church people. Six weeks of common fasting have been previously observed, and a week of uncommon, almost absolute starvation precedes Easter Sunday. During that week confession is made, and absolution in some sense given in a very wholesale manner by the priests who attend for the purpose.

"Evan, where are you going?" said a friend of mine to his servant man, on one of these days of "Gavating;" that is, confessing.

"I am going to confession; I'll be back in a quarter of an hour, the church is just at hand."

"But I cannot let you go to-day, I want you."

"God help me, John the son of Thomas, but I must go; this is the last day of gavating, and if I don't go, I shall have no certificate to get a clean passport; I will be back in a few minutes."

"How can you manage to confess all your year's sins in a few minutes?"

"Your honour, if I had only five kopecks, the pope would keep me a long time, but I have a rouble and that will get me through in five minutes I know how to do." Off the fellow went, and returned in less than half an hour with all his spiritual accounts squared. On the Sunday after this week of confession, all Russia is cleaned and purged of twelve months' sins.

A dramatic exhibition of the resurrection is given in every church in the empire on the Saturday evening at twelve o'clock precisely. On Easter Sunday there are kisses and congratulations, eggs are handed about from hand to hand, feasting is at its height, and the hospitals are full by Tuesday or Wednesday.

There is a manufactory near St. Petersburg, at which about two thousand hands used to be employed. On a week previous to a certain Easter Sunday, while confession was going on, in order to take as little time from Mammon as possible, the machinery was stopped in sections, and the people were permitted to go in batches, according to the nature of the work at which they were employed. Weavers confessed together at one time, spinners at another, and so on. Connected with and adjoining these works was the church where confession took place, and a private passage led from the works to the church by which the penitents passed into the church; having confessed, they went into the street by the main church entrance to go home. Now, in Russia, all workpeople are strictly searched by male and female searchers as they pass out from their place of employment; but in confessing season when these particular workpeople went direct to the church, by the private way, to confess a year's sins in the lump, the right of search had never been enforced. But on a certain day the director of this factory received a hint concerning this omission, and took his measures accordingly. At eleven o'clock a large batch (four hundred in all) of women, young and married, girls and old wives, left their various posts, and took their way across the yard, with demure and penitent looks, to the private entrance, where they were admitted as usual, filling the stairs and passages. When all were inside, the bottom door was bolted and guarded. Means of escape being thus cut off, the front rank on approaching the door of communication with the church, found half a dozen searchers, backed by as many policemen. The first two women searched were stripped of a large quantity of valuable material secreted under their clothes, in their boots—in fact, wherever they could stow it. Each had as great a weight of plunder as she could possibly carry. The work of searching went on, but the mass of women on the stairs and in the passages got scent of the presence of the searchers. The word was passed, a peculiar sound was heard as of many persons dressing and undressing, and in a few minutes the women were all standing as innocent as lambs, and as harmless as doves, up to their knees in material, valued according to an after computation at five hundred pounds sterling.

This had been going on for years. But let it be remembered that the people are not taught morality and honesty as part of their religion.

I will attempt to give an idea of what Holy Russia can achieve in this line. Saint Nicholas, or Nikoli, as he is termed in Russia, was "a saint so clever," who, many years ago, lived on the banks of Lake Ladago the Great. He was a

man reputed for his wonderful sanctity, austerity, and wisdom. Many extraordinary cures had he effected, which were ascribed by the simple peasants to supernatural power. He belonged to the real old uncorrupted Greek religion, such as it was in the days of its purity; he flagellated himself unmercifully for his deficiencies, bemoaned the falling off of the primitive faith, and prophesied dire calamities in consequence. One of his favourite prophetic visions was the downfall of the Ottoman empire, the total destruction of all the Turks, the substitution of Russia for those "dogs" in the East, in the reign of a namesake of his own, a Nikoli, and the simultaneous restoration of the pure old faith. One day he was on a sloping bank of the great lake, seated on a large boulder-stone, talking and speaking words of wisdom to friends who had come a long way to hear him, and at the same time inwardly praying to be removed to the capital, that he might have there a wider field of duty, and give his counsel to the emperor, who was at that time consolidating Petersburg. At once the stone on which he sat began to move, and, sliding gently down towards the lake, carried him with it, in spite of the exertions of his friends. On the lake the stone swam like a duck, and set off, dead against the wind, across the sea (the Ladago is some sixty miles broad, and eighty long). Nikoli waved a farewell to his astonished friends, and calmly held his course. For six weeks he sailed on, buffeting winds and waves, not knowing whither he went. At length he passed from the great lake into the Neva. But he did not reach the capital. A ukase had gone out against the arrival of any more big stones, or monoliths, after that which Peter rides on, in the Admiralty Plains. Nikoli's stone must have known this, for when it came to a place called Ishora, it turned into a small tributary, and held on up the narrow river, dead against the stream, for four good miles. Then it stopped stone still at the village of Colpino, where the saint was obliged to get off and land. It so happened that just as Nikoli came sailing up this small river, the peasants had collected, and were dancing one of their holiday dances. They saw the strange sight of an old man sailing on a stone, and thought they saw the Evil One. "Churt! churt!" they cried, and ran off. One man, however, who had more sense, cried out, "God be with us! that is old Nikoli Nikoliovitch, from the Ladago, the wise man." This discriminating man took the poor exhausted mariner in, and dried his feet, set bread before him, got the samovar ready, and laid him on the peach bed, doing all he could to revive his poor weatherbeaten frame. But the saint's time was come; he died in the arms of his kind entertainer, prophesying many events, "which have all come to pass," and having by this expedition on the stone entitled himself to be canonised and placed in the highest rank among Greek saints. So, canonised he was; a picture of him was made and encased under silver, with



rays of glory springing from his head; the picture was hung up in a frame, and a small church built on the spot where he died. To this church resorted many thousands every year on the anniversary of his death, the ninth of May. They who had diseases were healed, the lame walked, and the blind saw, after a visit to Colpino on the saint's day. By-and-by the Empress Catherine established at this place a cannon-foundry, and brought Gasgoine, from Carron, in Scotland, to teach her to make guns. He brought more people, and she also sent a host of Russians, so the little church became too small, besides being found at an inconvenient distance from the great new village. Then there was built a grand new church, as large and handsome as any ordinary saint could desire, for Nikoli; and as he had been a source of great profit in the old church, it was deemed that he would be more profitable than ever in the new one. They thought, therefore, to remove him; and one day they did, with great pomp and ceremony, remove him from among his old friends and old faces. The ceremony over and the door locked, the popes retired to play at cards at a party in Vassilia Petrovitch's grand government house. But if Nikoli came to Colpino on a stone without any free will of his own, he was not going to be removed from his old comfortable quarters by the will of the priests without his own sanction, so he got up in the night, kicked open the door, walked three miles back to his dear old church, and hung himself up again on his old nail, close to the altar. There he was found in the morning. The priests were not to be put out by an old picture, so they took Nikoli back, double nailed him, rolled stones to the door of the church, and set a watch. It wouldn't do. Nikoli came out at a window, and was found in his old berth on the morning of the second day. The priests now appealed to the empress, who sent Potemkin to negotiate with the saint, and after considerable trouble he managed to bring the old fellow to terms. Nikoli consented to be removed, on the condition that on the ninth of May in every year for all time to come, a procession of great priests should carry him on a visit to the old church, and carry him back. For, he was determined that the people should have this opportunity of receiving his blessing and enjoying his miraculous healing powers. This is the legend; now for its effects.

For a week previous to the ninth of May, I have seen the principal road to Colpino gradually assuming the appearance of a road leading to some great fair. Pilgrims of all ages and both sexes begin to pass me first singly and at intervals, then by groups in closer file, until the road is covered with weary travel-stained footsore and hungry-looking travellers. Many of them come from far distances, two or three hundred miles away. The great proportion are not mou-shuks, or mere peasants, but very respectably-dressed persons above the rank of serfs, and evidently possessing means. They are nearly all barefoot, and carry the pilgrim's staff and wallet. They must not enter a house on

their journey, unless they would spoil the blessing they expect. The sun may be blazing on their devoted heads, the rain may be coming down in torrents—this does not signify, on flows the stream of devotees. I have seen them ill and sick and fainting, and I have seen cordials given to them by kind English women. The lame pass, and the blind, and the rheumatic, and people afflicted with various diseases; sick children in the arms of their fond mothers, and old tottering age supported by stalwart sons and daughters. On the eighth the road is densely crowded; the Petersburg pilgrims, who do not take the liberty "to boil their peas," start in the evening to walk all night, and arrive in good time in the morning. For those who do "boil their peas," trains run to Colpino, beginning early on the ninth, and pour out their teeming freight at the stations every half hour until twelve o'clock. Those who can command a team, drive down, instead of mixing with the poorer sinners in the train. The pedestrians and more sincere dupes have by this time reached the spot, so that on the final day carriages only are seen on the road.

I have been present at Colpino Place on the evening of the eighth, and have seen from fifteen thousand to twenty thousand wayfarers such as I have described, lying in the wind and rain all night around the church. I have been there on the ninth, and have seen this number doubled by fresh arrivals from Petersburg by train and road. Taking my stand at ten o'clock to see the procession, which begins at noon, I have had to wait until one, because Nikoli would not consent to move, until the large iron box for offerings was filled with money. I have gone into the church and taken my hat off to as ugly an old saint as it is possible to see; I have waited, not I am afraid in a very patient frame of mind, until my eyes have been gladdened by the sight of the holy banners, old tawdry and moth-eaten images and pictures, to the number of thirty, carried each by two priests clothed in sacred vestments. Then I have seen this great multitude rushing, crushing, squeezing, and pushing, to get into the line of march, and prostrating themselves in the mud in a long line huddled together, a mile long and more, enjoying the extreme felicity of having these banners and pictures—but especially old Nikoli—in a wormeaten frame, carried over them by the priests, who trod without mercy on the poor superstitious slaves. Then, as I have thought of the Indian Juggernaut, I have had my hat knocked over my ears, because I forgot to take it off as the humiliating spectacle passed by. I have followed this immense crowd with my eyes, as the people rushed again and again to be trampled over by the priests, and throw themselves again and again in the mud and dirt before and under the images. I have heard of miraculous cures effected on that great day; of those who came blind, going away seeing; of those who came on crutches, going away without them; of those who brought rheumatisms, leaving them behind; and even of women who never had



children, bearing children thereafter. Beyond what I have described, however, nothing was to be seen, unless it were the shows, the dancing-bears, the sweetmeat stands, and the segans or gipsies, brown as copper, who are miracle-workers, and who for half a rouble read my hand, and bestowed upon me three wives, fifteen children, and four estates.

### AN ELASTIC TRADE.

INDIAN-RUBBER, thirty or forty years ago, was known to the grown-up English world as a substance necessary to the furnishing of drawing-boxes, and to the use of all men and boys, women and girls, who had at any period of their lives pencil marks to efface. Paterfamilias smelt it on the surface of the holiday letter, electrical with energetic rubbing at the faint ruled lines which had saved the pen of the young calligrapher from travelling up hill and down hill and round all manner of corners. The consumption of Indian-rubber at some schools used to astonish the masters. My first school acquaintance with this article was, in fact, as a quid. When, therefore, I lately visited the Indian-rubber Works at Silvertown, and, being taken into the presence of the Masticator, was told that in the mastication of Indian-rubber began all its wonderful applications to the use of man, I saw in that engine an old grown-up schoolfellow. Mastication of Indian-rubber! Why, I have seen forty boys chewing like one, steadily, though surreptitiously; I have heard, here the creak of the tough fresh quid between the grinders; there, the juicier sound of work on the half-masticated article. The first machine masticator was found able to get through only about two ounces at a time. In the mouth, it was more than a day's work, and wearied the jaws to reduce to the right consistency a piece as big as a small filbert. Our manufacture was perfect when the hard rubber was transformed into a soft plastic mass, which we could use as dough for the manufacture of air-puffs or turn-overs. This pastry was to be heard bursting during school hours with unaccountable little cracks that might have converted some school-masters of the present day to a belief in spirit-rapping. We had a prejudice in favour of black rubber. When white inside, we were firm to an opinion (established by the rounded shape of the fragments cut from the imported flask-shaped mass) that it was a cunning preparation of cow's udder. We did not accept whiteness as a sign of purity.

Well, we who survive have now lived to know all about it. No schoolboy's mind thirty or forty years ago was ever poisoned with information on natural history. Indian-rubber was leathery, therefore hide; was Indian, therefore, hide of elephant. When spurious, or English, it was got from bull or cow. Some such opinion may still prevail at Eton, though every little Sunday-schoolboy has this mysterious affair by heart as a "common object," and will reply to questions at a gallop with the information,

that, This substance is the concrete milky juice obtained from several trees, but chiefly from one of the fig tribe. When first drawn, it resembles cow's milk in appearance; it has also a sweetish milky taste, and may be drunk with impunity. Like milk, it curdles, and then yields thirty or forty per cent of solid caoutchouc. Eton to Sunday scholar: Go on, little one. Why do you call it caoutchouc? Sunday-scholar to Eton: Caoutchouc from the Indian cachucu. The milky juice is received upon a mould of clay, generally pear-shaped, is white at first, but assumes its dark colour upon being dried in smoke. It is principally imported into Europe from Brazil, Columbia, and other parts of South America. Of late years, however, a considerable quantity has been brought from Java, Penang, Singapore, Assam, and Africa. Eton triumphant. Hollo, youngster. Foot short!

Jāvā Pē | nāng Singā | pōre | Āssām ānd | Afērī(1) | cū.

In the early days of Indian-rubber, the milky juice itself was now and then brought to us unchanged. Sir Joseph Banks had a bottle of it that did not for some time decompose. When it did, he in vain offered at Lisbon fifty louis-d'ors for another. In our own time it has been imported in barrels under the impression that advantage might come of its use in processes of manufacture; but it travels ill, and when it arrives in good order, after all the expense of coopersage and extra stowage, it is hardly so useful as a preparation that can easily be made by treatment of the solid rubber, which takes up the least possible room, and requires no care on the journey hither. Only a hundred years ago, Indian-rubber, which is now in some form part of almost every person's dress, of every room's furniture, was in this country a rare curiosity. In seventeen hundred and seventy, Dr. Priestley published a Theory and Practice of Perspective, with the following addition to its preface: "Since this work was printed off, I have seen a substance excellently adapted to the purpose of wiping from paper the marks of a black-lead pencil. It must, therefore, be of singular use to those who practise drawing. It is sold by Mr. Nairne, mathematical instrument-maker, opposite the Exchange. He sells a cubical piece of about half an inch for three shillings, and he says it will last several years."

Before this time the new substance had excited in France the attention of the learned. M. de la Condamine, a great French mathematician, who was sent in seventeen 'thirty-six to Peru, to observe the figure of the earth at the equator, wrote from Peru to the Academy of Sciences the first account of the curious juice used by the native Indians (after whom it has been called) and by other residents, for making syringes, bottles, boots, and so forth. He told how the articles were moulded in soft clay, how the moulds were broken, and the soft mass ornamented by pricks with a point of hard wood. He described the use of the liquid in those parts as a waterproof coating for cloth, and his own use of a great canvas prepared with liquid

Indian-rubber to cover his quadrant circle, when set up, and save him the trouble of removing it to shelter in bad weather. At the mission of the Cordilleras and Andes they use, he said, waterproof boots, which appeared to have been smoked. Sprinkling with Spanish white, or even dust removed the stickiness of surface. In one place he found caoutchouc, wrapped in two leaves of the bananier, used as a torch; and when afterwards in seventeen 'fifty-one, M. Fresneau discovered in the French colony of Cayenne, trees yielding elastic resin, M. Condamine revived the discussion by dwelling upon the probably great commercial value of such a discovery. Nevertheless, the only commercial use found for the caoutchouc in France was that of the surgeons who dissolved the rubber in ether, and by successive dippings of wax rods obtained elastic coatings from which, the wax being melted out by boiling water, elastic surgical tubes, seldom of uniform thickness, were obtained. Somewhat later it was applied by Messrs. Charles and Robert to the manufacture of an air-tight varnish for balloons; but even at the end of the last century it was rarely put in Europe to any use except that of rubbing out pencil marks; little was known of it more than that it came from America, and that its price was a guinea an ounce.

Its toughness, elasticity, imperviousness to water and air, its power to withstand corrosion by all acids (except concentrated sulphuric or nitric, which act on it slowly) all alkalis, chlorine and the chemical agents, with other qualities only now being recognised, passed wholly without practical attention until our own day—until, in fact, the year eighteen hundred and nineteen, when Mr. Thomas Hancock, who is fairly to be called the founder of the new school of industry arising from the application of caoutchouc to the arts, and who deserves a statue in Indian-rubber more perennial than brass, began his experiments. He looked for a convenient solvent, and looked in the right direction, namely, to oil of turpentine; but he failed at first, abandoned that search for a time, and in eighteen 'twenty took out his first patent for cutting the raw bottle-shaped mass into glove wrists, waist-belts, garters, stocking tops, straps, waistcoat backs, unpickable pockets, boots, shoes, pattens, clogs, &c. His elastic pieces were fastened where they were inserted by stitches, from which the Indian-rubber broke away. Then, thicker edges were made, and prepared by steeping in hot water. The imported bottle of rubber was cut into rings for gloves and stockings. Next, a way was found of joining cut edges by pressure under hot water, and the use was discovered of a stream of cold water to keep constantly wet the sharp blade that passed through the rubber to be cut. But the great help in Mr. Hancock's manufactory came from the use of a small hand-machine—a masticator with sharp and strong teeth, like the hand masticator now generally used for mincing meat. The imported rubber was by no means uniformly pure. Thus torn and ground while

heating itself with such tough resistance that a man could only work the handle on two ounces at a time, the tearing and grinding with the heat reduced all to an uniform workable mass. All waste cuttings and scraps of the workshop went into the mill, and the process, unpatented, was, wonderful to tell, kept a secret for twelve years by Mr. Hancock and his workmen—inquisitive minds being put on the wrong scent by the name of "pickling" given to the secret process. The first wooden hand-machine had soon been replaced by a larger iron machine worked by horse-power, which prepared fifteen pounds at a time, and of which the work was facilitated by previous heating of the raw rubber to a temperature of three hundred degrees. The charge of a steam masticator now, in the Manchester works, is nearly, or quite, two hundred pounds. This works the rubber into a solid uniform block six feet long, a foot wide, and seven inches thick.

The fifteen-pound blocks made by Mr. Hancock's smaller horse-power machine in eighteen 'twenty-one, were in the following year cut by him with an apparatus still in use for the purpose at all Indian-rubber works. The block, fixed on the movable bottom of a sort of trough, was raised, by simple machinery, to meet the sharp wetted edge of a slicing-knife that works over its face. Thus it was cut into those smooth oblong cakes for the drawing-school, which used to show the sawing strokes of the knife as a sort of grain upon their surface. In the same year, Mr. Hancock solved the problem of the turpentine solution, and in the next year he took out his patent for undersheathing ships (beneath their copper bottoms) with a mixture of dissolved caoutchouc, pitch, tar, &c. Now followed, naturally enough, the use of solution as a cement instead of thread, in the joining of Indian-rubber to other substances, as in gloves, &c. Boots coated with the solution became waterproofed. Then also the way was open, and was taken at once to many new appliances of caoutchouc, as in noiseless wheels, cushions of billiard-tables, gas-bags, collars for stop-cocks, experimental balloons. By mixing the liquid caoutchouc brought from America, with felt, hair, and wool under pressure, Mr. Hancock made a strong watertight artificial leather. But in the same year, eighteen 'twenty-four, a new name became prominent.

Five years earlier the late Mr. Charles Macintosh, then a manufacturer at Glasgow of the violet red dye called cudbear, had contracted with the Glasgow gas works for their tar and ammoniacal refuse. Getting naphtha from this, it occurred to him that naphtha might prove a good solvent of Indian-rubber. He therefore experimented, and succeeded in doing with naphtha what Hancock had done with turpentine. Then, in the year 'twenty-four, he took out a patent for the use of his solution in a new method of waterproofing. He made a smooth sandwich of his caoutchouc paste, between two large slices of cloth, pressing and smoothing all together under rollers; and this double fabric was the water-

proof which became so widely known under his name. Messrs. Hancock and Macintosh were in the following year one firm, working at Glasgow and London, and setting up a factory at Manchester for the working, by common agreement, of their patents. More applications of caoutchouc were devised by Mr. Hancock, who, among other contrivances, achieved a patent leather of the solution (instead of the original cream) pressed into flat fleeces of carded wool, between two layers of cloth: a tough substance, much used in machinery. Then, because tailors discouraged the use of their material, Messrs. Macintosh and Hancock opened shops for the sale of ready-made coats, capes, leggings, and other articles of dress, whereby the use of them was spread among travellers throughout the country. Twenty years ago, those old double fabrics, stiff in winter, and stinking in summer of turpentine or naphtha, keeping the wet out and all exhalations of the body in—feeling as if they were truly made of what Indian-rubber used sometimes to be called, lead-eater, and a lead-eater that retained all its food upon its stomach—still were in common use, although one beginning of the end of them had been made ten years before.

That lesser beginning of their end was made in Vienna, where the plan was devised of weaving goods with caoutchouc in the warp or weft. A thread of Indian-rubber had been made in 'twenty-six or seven by Messrs. Rattier and Guibal, of St. Denys, by a machine for cutting spirally a flat-pressed disc got from the bottom of one of the imported bottle masses. The process has since been perfected. A strip of caoutchouc stretched to five times its length, heated to the temperature of boiling water and then slowly cooled, does not again contract. The operation may be six times repeated, and a strip a foot long may be made to yield, by this sort of wire-drawing, fifteen thousand six hundred and twenty-five feet of Indian-rubber thread. Threads of caoutchouc made somewhat after this manner were sheathed by a braiding-machine with thread of silk or other fabric. Sheathed when at full stretch, and made elastic again by a hot iron passed over them, they contracted the surrounding thread into an uniform wrinkling, and afterwards allowed the play of the elastic core without breaking the fibres of its inelastic covering. Such compound thread was woven into elastic fabrics, first at Vienna, then in Paris, afterwards in London.

Meanwhile, pump-buckets, engine-hose, buffer-rings, elastic malting-shoes that would not crush the grain, caoutchouc corks, were coming into use, and the Manchester factory of Macintosh and Hancock produced four thousand square yards a day of double fabric waterproof cloth. At last, in the year eighteen 'forty-two, there began a great revolution in the Indian-rubber trade.

The natural rubber feels weather to an inconvenient extent; softens and becomes sticky under heat, and stiffens under cold. Mr. Goodyear, an American, having supplied by contract

some Indian-rubber mail-bags which he took to be good and durable, they softened and decomposed under service, through heat, aided by some chemical action of their colouring material. The failure ruined the trade. Mr. Goodyear made some simple experiments of curiosity on the effect of heat upon the composition that destroyed his mail-bags, and, accidentally letting a piece fall on a hot stove, found that instead of melting, as caoutchouc does at a high temperature, it charred and hardened. Further experiments led to the use of sulphur under a certain heat for making that great and valuable change in the caoutchouc, now called vulcanisation. He sent an agent to England with his new elastic rubber, durable, workable, deprived of its stickiness, and able to pass unchanged through all vicissitudes of weather. He desired to sell his secret. Nobody would buy. But Mr. Hancock, on seeing Goodyear's material, without analysis of it, or any unfair dealing, applied his wits to the discovery of a process that would effect such a change. He discovered for himself the sulphur process, to which Mr. Brockedon gave the name of vulcanisation. It is effected now in several ways: by rubbing together caoutchouc softened in naphtha, with ten or twenty per cent of sulphur, and heating to three hundred and twenty degrees; by immersing sheets of Indian-rubber sliced from the block, for two or three hours in melted sulphur, at two hundred and forty degrees, and then heating to three hundred and twenty, when the change takes place immediately; or by dipping only for two or three minutes in a certain chemical tub that contains bisulphide of carbon, with two and a half per cent of protochloride of sulphur, and then washing to remove excess of chlorine. The vulcanised rubber undergoes a change not at all well understood theoretically when it is thus made to absorb ten or fifteen per cent of sulphur, whereof only one or two per cent is joined to it chemically. The great practical fact is that it then not only ceases to be sticky, but remains elastic at all temperatures.

In 'forty-three, Mr. Hancock took out a patent for his process of vulcanisation. In the year following, an English patent was also taken out for Mr. Goodyear, and the two patents were worked without open dispute until seven years ago, when an action being brought to try whether Mr. Hancock had stolen the idea of Mr. Goodyear, it was proved that he had not, though Goodyear's material suggested the independent investigation towards an achievement of the same result. To return to the history, we finish it by adding that in 'forty-five a new patent was taken out for getting rid of excess of sulphur by use of a strong hot solution of sulphate of soda or potash, and since that time new ways have every year been found of working and applying the vulcanised material: which has driven most of the old fabrics out of the market. Vulcanised in moulds under pressure, the Indian-rubber becomes hard like ebony, can be turned in a lathe, and will make combs, cups,



light incorrodible scale-pans, opaque chemical bottles, ornaments of many kinds. Fifty patents were taken out by the firm of Macintosh and Hancock for new applications of the vulcanised material. Mr. Cow, of one of the royal dock-yards, suggested the use by ships at sea of a large sheet of vulcanised Indian-rubber to be thrown over the side in case of leak by accident or shot-hole. The pressure of the water forcing it against the ship's bottom would stop the leak until the carpenter had done his work on it. The quantity of caoutchouc imported has been doubled and again doubled within ten years. Mr. Brockedon has kept vulcanised Indian-rubber for fourteen years in still water, and for ten years in damp earth without visible change. He has beaten a small piece, an inch and a half thick, with a steam hammer of five tons falling two feet, without injuring it or destroying its elasticity—falling four feet, with the result of tearing it, but without injuring its elasticity, which has borne the test of a pounding as between cannon-balls under the heaviest steam-hammers. Logs of wood, coated with vulcanised rubber, have been towed in a ship's wake to Demerara and back: the coated logs coming home perfectly sound, while the uncoated timber was riddled by marine creatures. Several projectors have declared that Indian-rubber resists cannon and rifle balls, and some have even offered to stand fire in their shot-proof Indian-rubber armour. But a leg of mutton so armed, shows in itself the bullet-hole, though the complete contraction of the elastic sheath effaces all trace of the points at which the bullet entered and passed out.

Such is the story of a trade yet in its infancy. At Silvertown—the Woolwich works of Messrs. Silver and Co. of Cornhill and Bishopegate—all the processes here indicated may be seen at work, from the masticating-room with a cupboard full of raw material in bottle and crude lump, and the central machine that converts it into workable blocks, to the show-room of "ebonite" manufactures from the hardest vulcanised material, useful and ornamental, including even a hard and pleasantly elastic Indian-rubber pen. Beyond this, is to be seen evidence of the constant tendency of the new trade to conquer to itself new ground. Here, is an electrical room, with an outlook upon railway posts carrying electric wires, passed through all forms of insulators in addition to those of the crockery-ware or glass now commonly used. Each wire runs to a test apparatus, and it is demonstrated that no material can be employed that insulates so perfectly as the vulcanised Indian-rubber, which is also indestructible whether by fracture or corrosion. Over the way, therefore, we find in the factory, women and girls at work, making insulators.

In another room, is a marine telegraph cable, running across great reels, and being swathed in successive bands of the same tough incorrodible and perfectly insulating substance; for

to this use of caoutchouc Messrs. Silver and Co. have for some time past paid peculiar attention. The workpeople of the factory have their invention stimulated by the capabilities of the material they work upon. Here, for example, is a shrewd foreman who has stumbled over the vulcanised Indian-rubber honeycomb mats now in much use, whereof all the hexagons have to be separately cut from cast tubes, and glued together. "Why the waste labour?" he asks; and turning to account the elasticity of his material, and the fact that a certain treatment with heat will make it retain any form into which it is stretched, he stamps his mat out of a single block, without letting fall a shred of waste, and so produces, with an enormous economy of labour, the same article, cheaper, nearer to perfection, and by far more durable.

Every inventive workman at Silvertown has credit for his own contrivances, not only from the firm, but from all visitors to the works who are informed of his discovery. It is most noteworthy that beyond this, in the space that is to represent Silvertown industry at this year's International Exhibition, inventions peculiar to the establishment will not be claimed in gross by the heads of the house. Every device originating with the men will have attached to it the name of the workman who is its inventor. This is part of a liberal and wise system, by which factory life is being greatly humanised in the hands of many English firms. At Silvertown, employment is found for women as far as possible, and in departments of those works occupied by other branches of the business of a great outfitting contractor—as in the caning of chairs among the cabinet-makers—there is work for children. For the children there is a school; for all hands there is a chapel, with the superintendence of an active chaplain-schoolmaster. The men form a rifle-corps of their own, with a head of the house for major; and they have mustered among themselves a good brass band. Comfortable dwellings are built in a little street outside the factory gates. There is a Silvertown Mechanics' Institute, with free weekly lectures, there is a school-treat on Easter Monday, and there is a concert on Whit Monday. The tall chimney by the river-side at Woolwich, marks, in fact, not only a place of mechanical industry, but the centre of a cheerful, wholesome influence; and this is, happily and honourably, becoming true now-a-days of many a tall chimney in our land of factories.

#### MR. CHARLES DICKENS'S NEW READINGS.

On Thursday, April 24th, at ST. JAMES'S HALL, Piccadilly, at 8 o'clock precisely,

MR. CHARLES DICKENS will read his

**DAVID COPPERFIELD**

(In Six Chapters),

AND

**MR. BOB SAWYER'S PARTY,**

FROM PICKWICK.

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